

Additional chart coverage may be found in CATP2, Catalog of Nautical Charts. SECTOR~1 --- CHART~INFORMATION

SECTOR 1

WEST COAST OF NEWFOUNDLAND—FLOWER'S ISLAND TO CAPE RAY

Plan.—This sector describes the coast from Flower's Island (51°18'N., 56°45'W.), at the W entrance of the Strait of Belle Isle, to Cape Ray, the SW extremity of Newfoundland.

General Remarks

1.1 Aspect.—From the entrance of the Strait of Belle Isle to Bonne Bay, about 110 miles SSW, the coast is dominated by the Long Range Mountains. This continuous range rises steeply from the coastal plain to the highest elevations in Newfoundland. Gros Morne, 808m high, one of the highest elevations of the range and of Newfoundland, overlooks Bonne Bay.

The coastal plain at the base of the mountains rises gradually from the sea in elevations seldom exceeding 91m. The plain is crossed by numerous streams which flow in wide, shallow valleys and spread into broad lakes. Many of the lakes reach the sea.

The W coast between Bonne Bay and St. George's Bay, about 35 miles SSW, is deeply dissected and characterized by a series of isolated uplands separated by deep fjords and valleys. Bonne Bay and the Bay of Islands are typical fjords penetrating far inland and enclosed by steep to, sheer cliffs which rise nearly 305m. Corner Brook, one of the largest ports in Newfoundland, is situated in the Bay of Islands.

Mountains of the area between Bonne Bay and the Bay of Islands include Mt. St. Gregory, 683m high, on the N side of the Bay of Islands; Blow Me Down, 645m high, on the S side of the Bay of Islands; Lewis Hills, rising to 815m between the Bay of Islands and Port au Port Bay; and Table Mountain, 299m high, at the head of Port au Port Bay. These mountains are notable for their steeply rising sides and level to gently rolling upper surfaces.

The Southern Long Range Mountains extend NE from near Cape Ray toward the central part of Newfoundland. The abruptly rising Table Mountain, 518m high, is the SW termination of this range. The Anguille Mountains, which rise to 536m on the S side of St. George's Bay, are separated from the Southern Long Range Mountains by the wide valley of the Great Codroy River.

Pilotage.—Pilotage for ports in this sector is obtained through the Atlantic Pilotage Authority. See Pub. 140, Sailing Directions (Planning Guide) North Atlantic Ocean, Baltic Sea, North Sea, and the Mediterranean Sea for further information.

Regulations.—In Canada, it is permissible for private interests to provide aids to navigation for their own use. The requirements for the color and shape of private buoys, as well as their placement and use, are the same as those for buoys provided by the Canadian Coast Guard.

Vessels of 500 grt or more are required to contact the Canadian Coast Guard Traffic Center at St. John's via radiotelephone for information regarding navigation in the waters off Newfoundland and Labrador.

Flower's Island to St. John Bay

1.2 Flower's Island (51°18'N., 56°45'W.) has a conspicuous disused lighthouse standing on it.

The **New Ferolle Peninsula** (51°01'N., 57°06'W.) is partially wooded and rises near its center to a ridge, 24m high, on which there is a cairn.



New Ferolle Light

The Highlands of St. John rise behind the SE shore of **St. John Bay** (50°52'N., 57°08'W.). In this range, North Summit rises to 492m and South Summit rises to 483m; both peaks are conspicuous and are surmounted by cairns.

Gros Morne (49°36'N., 57°47'W.) is a notable peak rising to a height of 808m.



Gros Morne

Two conspicuous hills rise directly on the coast. Of these, Parsons Pond Hill, 143m high, rises in position 49°59'N, 57° 44'W. Berry Hill, wooded and dome-shaped, rises to 145m in position 49°37'N, 57°56'W.

A conspicuous cliff, 305m high, lies about 1 mile NNE of **Cape Saint Gregory** (49°24'N., 58°15'W.); the cliff terminates in a series of white, rocky hills.

1.3 Mount St. Gregory (49°19′N., 58°12′W.), the highest coastal elevation between Bonne Bay and the Bay of Islands, rises to 686m about 2 miles ENE of **North Head** (49°19′N., 58°16′W.); from the W, the mountain appears as three distinct peaks, but from S it shows as a single, sharp peak.

Winds—Weather.—Winds on the coast of Newfoundland are affected by the topography and tend to be strongest in and out of inlets and harbors.

From November to January, the average wind velocity at St. George's is 18 knots; in summer the velocity falls to about 13 knots. Winds average strongest throughout the year at approximately 1500. In winter the winds average lightest from 0300 to 0400, and in summer are lightest at about 0600. From October to February, gales blow an average of 4 days a month.

The annual precipitation at St. George's is 90mm, and at Point Riche it is 130mm. From December to March, most of the precipitation falls as snow. Snow also falls on several days in November and April, and on 1 or 2 days in October and May. The snow usually occurs in the cold NE winds of depressions; it may also occur with W to NW winds, at times with blizzard-like intensity.

The average number of foggy days at St. George's is 25. June and July have an average of 5 foggy days each, and the average from October to January is 1 day each month. Point Riche averages 13 days a year with fog.

Ice.—The extent to which the W coast of Newfoundland is affected by Arctic drift ice which passes through the Strait of Belle Isle in January is at present unknown. River ice, gulf ice, and Arctic drift ice are mixed together to form the covering of the Gulf of St. Lawrence, but the proportions are indeterminate. The last section of the gulf to close and the first to open is the coast from Cape Ray N to the Bay of Islands. Northwest winds close the ice on this coast while SW winds open a lane of water inshore. The ice usually clears the first half of May, but may remain much later.

A portion of the ice setting E through the Gulf of St. Lawrence appears to split on Cape St. George, the main body passing into St. George's Bay and toward Cabot Strait, and the remainder generally setting NE, especially in March and April. The ice setting toward Cabot Strait sometimes causes a block between Cape Ray and Cape North, on Cape Breton Island, about 56 miles SW.

A Canadian icebreaker operates in the Gulf of St. Lawrence during the ice season.

The coast from the Bay of Islands to Cape Ray is the last area in the Gulf of St. Lawrence to fill with ice, and the first to open.

Tides—Currents.—On the W coast of Newfoundland, the ebb current generally sets NE and the flood current SE. The current is scarcely appreciable from Cape St. George to the Bay of Islands, but then to Point Riche it may be considered constant, with a velocity of about 1 knot. It is stronger nearer

the land, and the vicinity of bays and inlets is deflected by the inset and outset of the tidal currents. It is of greater than usual force before a SW wind begins, but a strong NE wind causes it to slacken and even turn SW.

In the area W from the Strait of Belle Isle to a line drawn S from the Eskimo Islands, Quebec to Point Riche, the currents are variable and uncertain, being intermediate between the above current and the tidal currents of the strait. In the W part of this area, the velocity is usually less than 1 knot, and rarely more than 1.5 knots, but toward the entrance of the strait it increases. A current sometimes sets strongly onshore about Flower's Cove from the vicinity of Greenly Island to the NE.

A NE current of 1 knot usually runs between Point Riche and the Bay of Islands, about 100 miles SSW. This current is influenced by tidal currents which are NE on the rising tide and SW on the falling tide. The current is stronger than usual before a SW wind begins. In strong NE winds the current slackens and sometimes reverses. The current is stronger near the land than farther out, and in the vicinity of bays and inlets is deflected by the inset and outset of the tidal currents.

1.4 Round Head (48°38'N., 59°03'W.), which from the NW appears as a smooth dome noticeably higher than the land N or S, is the culmination of the land which rises gradually from Long Point.

Conspicuous on the mainland stretch of coast are **Mount Virgin** (49°05'N., 58°24'W.), an isolated pillar, and **Bear Head** (49°01'N., 58°30'W.), which from the S appears as a crouching animal.

Table Mountain (48°33'N., 58°43'W.), at the head of Port au Port Bay, appears as the end of the high land to the N when viewed from sea, SE across the Port au Port Peninsula.

The most prominent feature between Cape St. George and Cape Ray is **St. George's Bay** (48°21'N., 58°40'W.).

Navigation off the W coast of Newfoundland is unimpeded by offshore islands or shoals.

Caution.—Vessels approaching the steep-to islands that lie across the entrance of the **Bay of Islands** (49°13'N., 58°10'W.) from the W should use caution.

1.5 Flower's Ledges (51°18'N., 56°45'W.), parts of which dry up to 1.5m, extend about 0.5 mile NW and about 0.7 mile W from Flower's Island. Tidal currents set strongly over the ledges. Pillot Bank, with a depth of 10.1m, is located about 1.8 miles WSW of Nameless Point.

Flower's Ledges can be avoided by keeping the houses on the W side of **Bear Cove** (51°16'N., 56°46'W.) open W of the Seal Islands and having them bear 177°. This leads W of Flower's Ledges.

Flower's Cove is entered between **Capstan Point** (51°18'N., 56°45'W.) and a point about 0.5 mile S, extends 0.7 mile NW to its head. Rocky Island is a rocky islet situated close within the entrance to Flower's Cove. The island is connected to the N shore by a shallow bank. Flower's Cove Light shown on the island from a white square tower at an elevation of 5.5m. The light is at the island's center.

The village of Flower's Cove is situated on the shores of the

Depths—Limitations.—Flower's Cove has charted depths of 1.9 to 5.1m.



Flower Cove Light

Aspect.—The white building and spire of the church which stands about 0.3 mile E of Capstan Point are conspicuous.

A pair of lights in range 107° are shown from the SE shore of Flower's Cove; this range leads into the cove in a least depth of 4m.

Flower's Cove Lighted Buoy is moored about 0.9 mile W of Capstan Point.

Anchorage.—Anchorage for small vessels is available, in a depth of 5.2m, at approximately 0.2 mile W to WSW of Rocky Island Light.

Caution.—A rock, with a depth of 3m, lies about 0.7 mile N of the entrance range, in a position about 0.8 mile WNW of Capstan Point.

1.6 The Seal Islands is a group of four small islands and some rocks lying on the side of the approach to Flower's Cove. The W island is composed of white rock, the E and largest island is grass-covered and houses stand on it.

Seal Ledges, with two drying heads, borders the Seal Islands for about 0.5 mile on their N side to a distance of about 0.2 mile offshore. A reef, with depths of 6.9 to 8.7m, connects the E end of Seal Ledges with a shoal off Capstan Point.

Rocky Island (Harbor Rock) lies in the middle of Flower's Cove, close within the entrance. A shoal flat connects Rocky Island with the N side of the cove. Depths of 4.5m are found between Rocky Island and the cove's S entrance point.

Mariners are cautioned that cod traps are often moored in the entrance to Flower's Cove.

A conspicuous black cliff close S of **Bear Cove Point** (51°16'N., 56°46'W.) marks Deadman's Cove, where there is a settlement.

Anchorage.—Small vessels can anchor, in about 5.1m, mid-channel, with Harbor Rock bearing 242°, distant 0.2 mile.

1.7 St. Barbe Bay indents the coast between **Anchor Point** (51°14'N., 56°49'W.) and St. Barbe Point, about 1.7 miles SSE.

St. Barbe Harbor (51°12′N., 56°46′W.) is entered between Harbor Point and Stony Point, about 0.2 mile E. A public wharf, 87m long on its N side and 9m wide at its outer end, extends from shore close S of Harbor Point. The N side has depths of 4.3 to 6.7m.

Ice.—St. Barbe Bay freezes late in November or during December. The ice breaks up about the middle of May.

Tides—Currents.—Spring tides rise 1.2m; neap tides rise 0.9m.

Tidal currents continue to run in the harbor fairway until 1 hour after HW and LW by the shore.

Depths—Limitations.—St. Barbe Bay has general depths of 10.9 to 18.3m, but its N part is shoal in several places. General depths in the outer part of St. Barbe Harbor are 5.5 to 9.1m.

Anchor Point, the N entrance point of the bay, has Anchor Ledge, parts of which dry, extending about 0.4 mile SW from it

Ice Point, 0.8 mile SE of Anchor Point, is fronted by shoals extending as far as 0.3 mile offshore.

Winter Flat, a rocky flat with a least depth of 3m, lies about 0.3 mile SE of Ice Point. Two 3.6m shoal heads lie about 0.2 mile E and SE, respectively, of the flat, and an 8.7m patch lies about 0.3 mile W of it.



Courtesy of W. J. McLean

Anchor Point

Anchor Cove, located close E of Anchor Point, is a small cove. The passage into the cove is 30m wide. There is a public wharf, 24m long, with depths of 5.8 to 6.1m at the outer end, on the N shore of Anchor Cove. A light is shown from the E entrance point of the cove.

Winter Cove, about 1 mile ESE of Ice Point, is completely open; reefs encumber its entrance. Rocks and shoals extend as far as 0.3 mile offshore between Winter Cove and Stony Point, about 0.8 mile S.

Shoals extend about 0.5 mile WNW from Harbor Point, the W entrance point of St. Barbe Harbor.

The shores of St. Barbe Harbor are bordered by shoal flats.

Aspect.—The white houses on the shore of Anchor Cove, directly E of Anchor Point, are a good mark for the area, which is very low and largely wooded.

The W side of St. Barbe Harbor is indented by Traitant Cove, which is shoal.

Anchor Point Light is situated on a wharf in position 51° 14'N, 56°48'W.

A lighted buoy is moored close S from the S extremity of Anchor Ledge.

St. Barbe Harbor leading lights, in line bearing 105°, are situated on Stony Point.

St. Barbe Harbor Light is shown from a mast on the outer end of the public wharf.

Anchorage.—Anchorage can be taken, in 7.8m, mud. The anchorage is rather confined, but the holding ground is good.

Directions.—Vessels steer to pass in depths of not less than 11m between Winter Flat and the shoals extending WNW from Harbor Point. Follow the leading lights on Stony Point and then steer in mid-channel into the harbor and the anchorage.

Caution.—Foul ground extends from the N shore of St. Barbe Bay to a distance of 0.4 mile in places.

St. Barbe Point must be given a berth of at least 0.2 mile.

1.8 Pound Point (51°11'N., 56°49'W.) is located 1.5 miles SSW of St. Barbe Point.

Current Island, 32m high, lies about 0.3 mile SW of Pound Point. A piled-stone beacon, surmounted by a pole, stands near the SW end of the island.

Sainte Genevieve Bay is entered between Current Island and Cape Saint Genevieve, about 2.5 miles SSW. The bay is en-

cumbered with many rocks and shoals, however, it affords anchorage to small craft. The channels are intricate and narrow; local knowledge is necessary.

Ice.—Sainte Genevieve Bay freezes late in November, or during December, and the ice breaks up in the middle of May.

Tides—Currents.—The mean HW interval at Sainte Genevieve Bay is 10 hours 33 minutes; spring tides rise 1.2m.

Depths—Limitations.—South Pass has a least depth of 5.5m in the fairway. There are depths of 1.8 to 5.5m in Middle Pass, about midway between Current Island and Gooseberry Island, about 0.5 mile S. Middle Pass is suitable for vessels drawing not more than 4m.

Aspect.—The E side of Sainte Genevieve Bay is low and wooded; it has no distinguishing features.

Anchorage.—Vessels loading pulpwood anchor in Sainte Genevieve Bay, gravel, good holding ground, laying out stern moorings to piers ashore.

Seal Point (51°07'N., 56°53'W.) lies about 0.8 mile SW of Cape Sainte Genevieve. Grelee Point is about 0.8 mile S of Seal Point.

Caution.—Gooseberry Island, 26m high, lies 0.5 mile S of Current Island and is covered with grass. Foul ground extends 0.25 mile W of the N end of Gooseberry Island, and a detached 3.6m patch lies 0.25 mile farther W. A 3.6m shoal lies about 0.8 mile W of Gooseberry's S islet, with a 5.5m patch about midway between. Porpoise Rock, awash at LW, lies on a 0.9 to 3.6m reef which extends S from the same islet. Reefs front the entire E side of Gooseberry Island; detached shoals lie E of the reefs.

1.9 Entry Islet, 2.4m high, lies about 0.7 mile S of Gooseberry Island, on a drying ledge and shoal which extend 275m N from the islet and 820m W from it. Entry Islet, composed of shingle topped with a sparse vegetation, is difficult to identify. A detached 3.6m patch lies nearly 1 mile WNW of Entry Islet; patches 1.8 to 5.5m lie nearly 0.5 mile NE and SE of the islet.

Southwest Point (51°08'N., 56°50'W.), the N extremity of a 1 mile long, narrow projection of the S shore of Sainte Genevieve Bay, lies 0.35 mile S of Entry Islet, connected to it by drying ledges.

Cape Islet, nearly 1 mile WSW of Southwest Point and about 0.4 mile NE, is 2.7m high. The islet consists of flat rocks, coarse grass, and debris. Shoal patches of 5.5m or less lie within 0.35 mile N of Cape Islet.

Pond Cove, between Southwest Point and Cape Islet, is encumbered with shoals and completely open.

Cape Sainte Genevieve, the S entrance point of Sainte Genevieve Bay, should be given a berth of at least 0.5 mile. A shoal, with a depth of 0.9m, was reported (1988) to lie 1.2 miles N of the cape.

Middle Pass and South Pass, the deeper channels leading into the bay, are narrow and intricate and should not be attempted without local knowledge.

1.10 Old Ferolle Harbor (51°05'N., 56°53'W.) lies between Grelee Point and Grave Point, nearly 3 miles SSW. It is fronted by several islands and rocks. The coast is densely wooded. The islands and headlands are in general bare, but difficult to distinguish.

Tides—Currents.—The HW interval at full and change in Old Ferolle Harbor is 9 hours 46 minutes; spring tide rise is 1.5m.

Depths—Limitations.—Northern Pass is 275m wide and 3.6 to 5.1m deep in the fairway. At the S end of the passage, 1 mile S of Grelee Point, there is a bar which divides the harbor into two parts. Small vessels can cross the W side of the bar with local knowledge. Southern Pass has charted depths of 9.1 to 10.9m in the fairway, which is indicated by a lighted range. Old Ferolle Harbor has depths of 7.3 to 18.3m.

Directions.—The harbor should be approached on the 090° lighted range which leads between the 4.5m and 5.5m shoal heads off Entrance Island and Grave Point. At the intersection of the lighted range and the range formed by the beacons at Grave Point, alter course into the harbor channel. Pass approximately 0.1 mile SE of Entrance Island and, after clearing this island and its drying reef, keep near the W side of the harbor. Vessels may steer a course of 045° keeping the beacons at Grave Point in range 225°, astern, which leads SE of Entrance Island and to the harbor.

To enter by Northern Pass, steer to pass the E end of the well-defined flat extending E from Fish Islet, then steer nearly 0.25 mile for the summit of Old Ferolle Island, and anchor, in 9 to 11m. mud.

Caution.—Drying reefs and shoal flats, on which lie several rocky islets, extend in places nearly 0.5 mile N and NW from the NW half of Old Ferolle Island, connecting its N end with Fish Islet, 0.25 mile farther N. Drying reefs and shoals also extend as far as 275m NW and 0.3 mile SSW from the SW end of Old Ferolle Island, connecting that end with Entrance Island about 228m farther S.

A 5.5m shoal lies offshore about 1.3 miles W of the beacon on Entrance Island, and another 5.5m patch lies 1 mile WSW of the beacon

A detached 5.5m patch lies in the entrance of Northern Pass, about 0.3 mile SSW of Grelee Point.

A well-defined shoal flat extends a few meters E from the E extremity of Fish Islet.

Shoals extend 0.1 mile SW from Entrance Island, and a drying reef 0.1 mile ENE from it.

A 5.5m patch lies close N of the fairway of Southern Pass, and a 4.5m patch lies close S of the fairway. Additional shoals extend SW to Grave Point from the 4.5m patch.

A shoal borders the W side of Old Ferolle Harbor to a distance of about 150m offshore in places; the E side of the harbor is similarly bordered to a distance of 0.1 mile offshore in place, as far S as the **Debon Peninsula** (51°04'N., 56°54'W.).

Northern Pass is suitable for small vessels only.

1.11 Brig Bay (51°04'N., 56°54'W.), at the S end of Old Ferolle Harbor, is entered between Grave Point and Front Point, about 0.5 mile E.

Aspect.—Woody Hill, 0.65 mile SW of Grave Point, is the highest elevation in the coastal hills. A bare patch on its NW face helps identify it from seaward.

Mount St. Margaret, about 4 miles SE of Woody Hill, is also conspicuous.

Northwest of Woody Hill, the coast is densely wooded, and the islands and headlands are bare and difficult to distinguish. The numerous fishing houses are whitewashed and very conspicuous.



Entrance to Old Ferrole Harbor and Brig Bay from W

Old Ferolle Island, 23m high, is fairly even in outline, and is covered with flat stones, grass, and moss. There are a few dead trees on its higher parts, and its NW side is bare.

Fish Islet (51°06'N., 56°53'W.) is 6.4m high and grass-covered. A few houses stand on its E part.

Two lights stand on the SE side of Old Ferolle Harbor, about 0.5 mile ESE of Entrance Island. In line bearing 090°, the lights lead through Southern Pass in a least depth of 9.1m.

Three range beacons stand close SW of Grave Point. In line bearing 225°, astern, the beacons lead through Old Ferolle Harbor. These beacons should not be depended upon. A flag-staff stands close SE of the center range beacon.

A beacon stands on Entrance Island. There is also a beacon on the S extremity of Old Ferolle Island; in line bearing about 017°, astern, the beacons lead into Brig Bay.

Depths—Limitations.—There is a public wharf on the W shore of Brig Bay with a berthing face. The depth alongside is 4.3m.

Between Grave Point and Dog Peninsula Point, about 3.3 miles WSW, the coast is low and difficult to identify.

Anchorage.—Vessels anchor in the S part of Old Ferolle Harbor, in 10.9 to 16.4m, with the Debon Peninsula bearing 122°. Anchorage farther NE, in about 12.8m, may be had with the mouth of the outlet of Grand Pond bearing 077°.

Anchorage may be taken by small vessels in the N extension of Old Ferolle Harbor, in 9.1 to 10.9m, mud.

Vessels can anchor in Brig Bay, in 11m, mud, good holding ground; the bay is entered between Grave Point and Front Point, about 0.4 mile ENE.

The **Dog Peninsula** (51°03'N., 56°59'W.) is faced with cliffs in contrast with the dark, wooded hills, inland. A conspicuous beacon stands 320m NE of Dog Peninsula Point.

Saint Margaret Bay is entered between Dog Peninsula Point and Black Point, about 1.6 miles SW.

Ice.—Saint Margaret Bay freezes late in November or in mid-December. The ice breaks up around mid-May.

Depths—Limitations.—There are depths of 14.6 to 18.3m in the W half of Saint Margaret Bay where Fisherman Cove, on the S side of the Dog Peninsula, and South Cove, in the S part of the bay, afford anchorage.

1.12 North side of Saint Margaret Bay.—Fisherman Cove, entered between the Dog Peninsula and a point a little more than 1 mile SE, has depths of 9.1 to 18.3m in its outer part. The cove shoals quickly to its head where drying ledges border the shore. Sheltered anchorage, in 14.6 to 18.3m, sand and gravel, can be taken in the cove, but during NW winds a heavy swell develops.

1.13 South side of Saint Margaret Bay.—South Cove, entered between Rock Point and Black Point, about 1.4 miles W, has general depths of less than 7.3m. A rocky shoal, with a depth of 4.5m, lies in the middle of the cove, about 0.4 mile within the entrance points. Eastward of this shoal is a channel about 182m wide and 7.9m deep. Small vessels entering South Cove should use this channel and anchor, in 7.3m, near the head of the cove. Larger vessels can anchor off the entrance of South Cove, in 12.8 to 14.6m, mud. This anchorage should be avoided in strong NW to N winds when much swell is produced.

Black Point, the SW entrance point of Saint Margaret Bay, lies about 0.7 mile NW of Entrance Point. Black Point is low, bare, and rocky, and is backed by a flat, thickly-wooded ridge.

An offshore rocky shoal, with a least depth of 4.5m, lies about 0.5 mile ENE of Entrance Point; several shoal patches, with depths of 8.2 to 9.1m, lie within 0.75 mile E and 0.25 mile SE of the 4.5m depth.

Directions.—New Ferolle Point (51°02'N., 56°57'W.), open N of Black Point and bearing 284°, leads about 200m N of the 4.5m depth, and close to or over some of the 8.2 to 9.1m shoal patches.

New Ferolle Cove (51°01'N., 57°04'W.) affords anchorage, in a depth of 5.5m, near its head. The anchorage is somewhat protected by a 4.5m shoal in the entrance of the cove. Houses, conspicuous from the NE, stand on the shores of the cove.

New Ferolle Point is the NE extremity of the New Ferolle Peninsula, an anvil-shaped projection of the mainland. The peninsula is partially wooded and rises near its center to a 24m high ridge, surmounted by a cairn. New Ferolle Peninsula Light is shown from a white tower approximately 0.4 mile NE of Ferolle Point.

Jehenne Banks, with a rocky patch having a depth of 5m, lies in position 51°03'N, 57°04'W. The tidal currents set strongly over the banks.

St. John Bay

1.14 St. John Bay is entered between Ferolle Point (51°01'N., 57°06'W.) and Barbace Point, about 20 miles SW.

Ice.—St. John Bay fills with northern ice and freezes in December or January. The ice breaks up in May. During severe winters, the ice extends from Ferolle Point to Point Riche (50°42'N., 57°25'W.).

Depths—Limitations.—North of Saint John Island, the general depths in St. John Bay are 18 to 37m. South of the island, the general depths are 18 to 73m. Throughout the bay there are scattered shoal heads of 3.3 to 9.1m.

St. John Bay—North Part

1.15 The Twin Islands $(50^{\circ}54'N., 57^{\circ}17'W.)$ are two low, flat, grass-covered islets. A few fishermen's huts stand on the N islet.

Garbett Shoal lies about 1.5 miles E of the Twin Islands. This shoal has a least depth of 5.1m, while Rupert Jones Shoal, about 1.2 miles NE of the Twin Islands, has a least depth of 7.9m.

James Island, about 6.25 miles SSW of Ferolle Point, is table-topped, rocky, and grass-covered.

The Fox Islands, the NE islands in St. John Bay, are two flat, grass-covered islands. Breton Reef, parts of which uncover, extends about 1 mile SW of Fox Islands.



The Twin Islands from NW from near Garbett Shoal

Old Boy Shoals lie about 1.3 miles SSW of Ferolle Point, with depths of 7.3m. Gibson Shoal, farther SSW, has a depth of 7m.

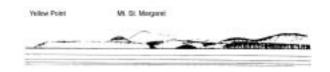
The Whale Islands are several low, flat, grassy islands lying between 2 and 2.75 miles S of the Fox Islands. Dolmen Island, the westernmost of the Whale Islands, has a conspicuous cliff, 6.1m high, at its E end.

Maldigues Bay, foul, lies between Ferolle Point and Long Point, about 3.5 miles SE. The shores of Maldigues Bay are low and bordered by limestone ledges as far as 1.5 miles off its N shore. During strong E winds, anchorage, in 10.9 to 14.6m, stones, can be obtained S of the limestone ledges. When approaching the anchorage, care must be taken to avoid Old Boy Shoals.

Two beacons stand on Yellow Point, about 2.8 miles SSE of Long Point.

Castors Harbor, a shallow inlet with a depth of less than 7.3m, is entered between Yellow Point and Castor Point, about 1.5 miles S. Banks and shoals extend off either side of the harbor, making the channel intricate and dangerous. Only small vessels with local knowledge can find shelter here.

The Bar, a rock which dries 0.3m, lies in the middle of the harbor and is scarcely visible except at LW, when there is no difficulty in rounding its S end.



Entrance to Castors Harbor from SW

Hinman Shoal has a least depth of 8.2m and lies in position 50°54'N, 57°03'W.

Cap Testu Bank, with a least depth of 7.3m, lies 1 mile SSW of Hinman Shoal.

Hinman Shoal and Testu Bank can be avoided by having Mount St. Margaret (51°01'N., 56°50'W.) in line bearing 050° with the E edge of the bare part of Yellow Point. This leads between Hinman Shoal and Testu Bank.

St. John Bay—South Part

1.16 Turret Point (50°50'N., 57°13'W.), the N extremity of St. John Island, is distinguished by a circular mound on the

coast nearby. Foul ground extends nearly 2 miles E from Turret Point, terminating in Reculoux Shoal, a 4.5m patch.

Turret Bay, in the middle of the N side of Saint John Island, is entered between Turret Point and a 5.5m high islet lying about 0.8 mile W. Turret Bay affords good shelter for small vessels with local knowledge. Temporary anchorage, in 21.9m, can be obtained off the entrance of the bay.

The Menhir is a conspicuous rock, 3.6m high, standing on the W extremity of Saint John Island. The W side of Saint John Island should be given a berth of at least 0.3 mile.



Southeast side of St. John Bay

St. John Harbor (50°48'N., 57°15'W.) indents the SW side of Saint John Island between Pigasses Point and Photograph Point, about 0.5 mile SE.

Tides—Currents.—Tidal currents are inappreciable in St. John Harbor.

Depths—Limitations.—Depths in St. John Harbor decrease gradually from over 37m in the entrance to 9.1m and 10.9m at the head, about 1.3 miles E.

Anchorage.—Temporary anchorage for small vessels can be obtained in Sesostris Bay, 0.25 mile E of The Fox, in 16.4 to 24m, sand and mud.

Small vessels can anchor in The Haven, in 9.1m, mud. Vessels over 30m in length are recommended to haul into The Haven. The holding ground and shelter is good; in heavy W gales the swell rolls in.

Temporary anchorage for small vessels can be obtained in Sesostris Bay 0.25 mile E of The Fox, in 16 to 24m, sand and mud. Small vessels can anchor in The Haven, in 9.1m, mud. The holding ground and shelter is good. During heavy W gales, a swell rolls into The Haven.

Caution.—O'Rourke Shoal, with a least depth of 9.1m, lies about 1.5 miles WSW of Photograph Point.

Seal Rocks, 2.1m high, lie on the SE side of a reef which extends more than 0.35 mile WSW from a position about 0.8 mile SW of Photograph Point.

Coombe Rock, a 5.5m rocky patch, lies about 1 mile S of Seal Rocks.

Coral Bank, on which there is a least depth of 10m, lies on the S side of the entrance of St. John Harbor.

Rocks and shoals extend about 182m W and SW from Photograph Point.

Close within Photograph Point, the S side of St. John Harbor is bordered by a shoal 45m offshore.

The Fox, a rock awash, lies on a flat, about 45m offshore, in a position about 0.8 mile E by S of Pigasses Point.

The N side of the harbor is bordered by shoal flats extending a short distance offshore.

About 0.3 mile E of Pigasses Point, however, the flats extend 230m offshore.

Good Bay (50°49'N., 57°13'W.), situated on the SE side of St. John Island, is fronted by Round Head Island and affords sheltered anchorage with good holding ground. The bay is entered from the NE or the S.

Tides—Currents.—The MHW interval is 10 hours 30 minutes; spring tides rise 2.2m and neap tides rise 1.6m.

Tidal currents are slight and quickly influenced by strong winds.

1.17 Islands and dangers in the SW approach to Good Bay.—Square Rock, about 6.1m high, lies about 0.8 mile ESE of Photograph Point and about 275m offshore. The passage between Square Rock and St. John Island is deep. Depths of less than 9.1m extend about 0.3 mile E and W, and about 235m S from Square Rock.

Evangeline Rock, a 3m shoal head, lies about 0.6 mile S of Square Rock.

Horn Island (50°48'N., 57°15'W.), 7.6m high, lies about 0.6 mile NE of Square Rock and close offshore. A beacon stands on Horn Island. Horn Spit, with a least depth of 1.8m, extends about 275m ENE from Horn Cap Island. Depths of less than 9.1m continue 0.25 mile NE and SE from the spit.

Cornish Patch, with a least depth of 10.9m, lies about 0.2 mile SE of Horn Island.

Shoal flats extend 230m SW and 0.35 mile S from Round Head Point on Round Head Island. Round Head Rock, with a depth of 0.9m, lies near the SE extremity of the S projecting flats. A shoal, with depths of 7.3 and 9.1m, lies centered about 0.5 mile ESE of Well Point. The shoal extends 0.75 mile in a NE-SW direction.

1.18 Islands and dangers in the NE approach to Good Bay.—Hare Island lies with the SW extremity nearly 1 mile WNW of Flat Point. Shoals, on which there is a rock awash and a least depth of 1.8m, extend about 0.2 mile SW from the SW end of Hare Island.

Passage Shoals lie between the above shoals and the NE extremity of Round Head Island. There is a least depth of 1.5m on these shoals, but a deep passage lies on either side of them; the E passage is wider.

Bayot Shoal, with depths of 1.2 to 8.2m, lies centered 0.25 mile N of the N end of Hare Island. The shoal extends about 0.3 mile in a NE-SW direction.

Directions.—The beacons on Horn Island and Flat Point, in line bearing 231°, lead between Bayot Shoal and Reculoux Shoal.

Black Point, lying about 2 miles SW of Barbace Point, open NW of Round Head and bearing about 231°, also leads between the above-mentioned shoals.

North Summit (50°47'N., 56°57'W.) of the Highlands of Saint John, in line bearing 091° with the middle of the westernmost Turr Island (50°50'N., 57°07'W.), leads N of Bayot Shoal.

1.19 South side of Good Bay.—Round Head, a conspicuous hummock, rises to 30m in the S part of Round Head Island, about 0.4 mile NE of Round Head Point.

Falaise Shoal, with a least depth of 3.2m, lies close off the N side of Round Head Island, in a position about 0.4 mile S of the beacon on Flat Point.



Round Head bearing 067°

Directions.—Horn Island (50°48'N., 57°15'W.), open a little off the foot of Round Head Hummock, and bearing 238°, leads NW of Falaise Shoal.

1.20 North side of Good Bay.—Well Point (50°48'N., 57°14'W.) is the N entrance point of Good Bay, at its W end. Two anchorage beacons stand on the point.

Well Bay, a small indentation of Good Bay, is entered close N of Wells Point and has depths in the middle of 9.1 to 10.9m. Two beacons stand on the shore about 0.5 mile NE of Well Bay.

Barred Bay indents the N side of Good Bay at its E end. Sheep Islet, 1.5m high and grassy, lies in the W part of Barred Bay. A drying reef extends 0.2 mile SE from Sheep Islet. The reef adjoins a shoal which in turn is connected to Flat Point. Depths on the shoal are 0.9 to 3.2m.

Flat Point (50°49'N., 57°12'W.) is the N entrance point of Good Bay at its E end. A beacon stands on the point.

Anchorage.—Anchorage can be obtained, in about 27m, good holding ground, with the beacons 0.5 mile NE of Well Point in line bearing about 008°, and the beacons on Well Point in line about 253°. Vessels can also anchor to the NE, in depths from 35 to 46m. A large vessel should moor open hawse E.

St. John Bay—South Part (continued)

1.21 Heavy squalls sweep down from the Highlands of St. John (50°44'N., 57°01'W.) upon this section of coast.

The **Turr Islands** (50°50'N., 57°07'W.) are two rocky, grasscovered islets lying about 3.5 miles NNE of Fish Point.



North summit of highlands of St. John in range 091° with the middle of the westernmost Turr Island

Bustard Cove (50°44'N., 57°14'W.) affords temporary anchorage in poor holding ground. The cove is open to the NW, and its E side is bordered by reefs and shoal water to 0.5 mile offshore.

1.22 East approach to Back Arm.—Savage Island, 14.9m high, lies a little more than 1 mile E of Barbace Point. Savage Island is grass-covered; a few houses stand on its S part. Shoal flats, with depths of 9.1m or less, extend about 0.4 mile NE, and the same distance W, from the N end of the island. Sauvageon Rock, 0.3m high and composed of boulders, lies near the middle of the W projecting shoal in a position about 0.3 mile WSW of the N end of Savage Island. A narrow 6.1m channel, which leads to Old Port au Choix, passes about 90m off the SE side of Savage Island. The channel passes close NW of shoal flats, which extend nearly 0.5 mile from the mainland SE.

A continuous reef, with depths chiefly less than 5.5m, extends for 0.8 mile SW from the S end of Savage Island. Round Islet, grass-covered and 2.4m high, lies on the reef in a position about 0.3 mile SW of Savage Island. The channels leading to Old Port au Choix pass on the NW and SE sides of the reef.

Anchorage.—Anchorage, in 10.9 to 16.4m, can be obtained in a position about 0.3 mile SSE of the S end of Savage Island. The anchorage is sheltered from all but NE winds.

1.23 West approach to Back Arm.—Barbace Point (50°44'N., 57°21'W.) is the SW entrance point of St. John Bay. A shoal flat extends about 275m NW from Barbace Point. Fishing nets are usually set off Barbace Point and should be avoided.

Shoal Flats border the shore between Barbace Point and the W entrance point of Old Port au Choix to 135m in places. A bank, with irregular depths of 7.3 to 18.3m, extends about 0.5 mile NE from the central portion of this shore. The bank extends about 0.5 mile in a NW-SW direction.

Temporary anchorage can be obtained, in 20.1m, gravel, about midway between Savage Island and Barbace Point.

1.24 Back Arm (Old Port au Choix) (50°43'N., 57°21'W.) is entered between the point 0.8 mile SE of Barbace Point and an islet, 0.6 mile high, lying close offshore, 0.4 mile farther SE.

Local knowledge is essential for entering this harbor.

Ice.—Back Arm freezes about December 15; the ice breaks up about May 20. However, the arm has been blocked as late as June 9. Drift ice arrives about mid-January and leaves about May 15.



Courtesy of Rex Boyd and Port au Choix 2000 Port au Choix

Depths—Limitations.—The channel between Querre Islet and Ardent Rock is about 68m wide, and has a least depth of 8.2m in the fairway; the channel between Querre Islet and offlying rocks and shoals of the mainland SE is about 115m wide and has a least depth of 7.9m in the fairway. The channel between the shoal flats off the NW side of the arm and the shoals bordering the SE shore is about 182m wide and has depths of 9.1 to 16.4m.

The harbor is primarily a fishing port. The Fisheries Marine Wharf has three parts with alongside depths of 3.4 to 4.9m. There is a Public wharf at the S end of the harbor, close W of the marine complex, with an outer face having a length of 34m and a least depth alongside of 4m. At the SW side of the harbor there is another Public wharf, 73m long, with a least depth of 4.4m alongside. The wharf of a fish plant adjacent to this Public wharf is 55m long, with an alongside depth of 2.4m.

Querre Islet, about 0.8 mile SW of Savage Island, lies in middle of the entrance of Back Arm. Querre Islet is 6.1m high, and extends about 320m in a NE-SW direction.

Ardent Rock, 0.6m high, lies about 160m NW of the SW end of Querre Islet. Rock is connected to the Port au Choix Peninsula W by a shoal flat.

Ardent Tail, on which there are depths of less than 1.8m, extends about 0.1 mile NE from Ardent Rock. A lighted buoy is moored close E of Ardent Rock.

Shoal flats, parts of which dry, extend from 90 to 640m off the NW side of the arm. The SE side of these flats is nearly steep-to, and a red spar buoy is moored near this extremity.

Shoals border the SE shore of the harbor.

A lighted whistle buoy, equipped with a radar reflector, is moored about 0.8 mile NE of Barbace Point.

Leading lights in line 224° are shown from the head of Back Arm. The passage between Querre Island and Ardent Rock is very narrow and extreme caution should be exercised when turning onto the range.

Port au Choix Light stands on the N end of Querre Island.

Anchorage.—Anchorage can be obtained, in 7m, 0.15 mile NE of the head of Back Arm.

1.25 The **Pointe Riche Peninsula** (50°42'N., 57°26'W.) is composed of terraced flat, gray rocks. Several crosses are erected on its summits and slopes.

Point Riche is the W extremity of the Pointe Riche Peninsula. The point is marked by a light. Two radio towers are situated 0.5 mile inland of Pointe Riche Light.

Pointe Riche Rock, with a depth of 1.8m, lies about 0.4 mile NW of Pointe Riche (Riche Point) (50°42'N., 57°25'W.); in heavy weather the sea reportedly breaks on this rock and on some 12.8m patches located 1 mile SW of Pointe Riche.

Directions.—Round Head (50°48'N., 57°13'W.) well open NW of Black Point (50°43'N., 57°24'W.), and bearing about 054°, leads NW of Pointe Riche Rock.

Igornachoix Bay

1.26 Igornachoix Bay is entered between Point Riche and Spirity Point (Eboulement Point), about 5.8 miles SSE.

Outer portion of Igornachoix Bay—North side.—Vessels should use caution when approaching the shore between Gar-



Courtesy of Rex Boyd and Port au Choix 2000

Pointe Riche Light

gamelle Cove, about 2 miles E of Pointe Riche, and Two Hills Point, about 4 miles SSE.

Temporary anchorage, with offshore winds, in 18.3m, can be obtained NNW of Two Hills Point, clear of the shoals.

Outer portion of Igornachoix Bay—South side.—Spirity Point (Eboulement Point), the S entrance point of the bay, has a conspicuous white house on its seaward side; the house, a single-storied structure, is the only house visible from seaward. In thick or heavy weather, Spirity Point (Eboulement Point) should be rounded in depths of at least 46m.

Directions.—The SE side of Two Hills Point, just open of the NW side, and bearing 062°, leads NW of the shoals off Spirity Point (Eboulement Point).

Inner portion of Igornachoix Bay.—Keppel Island, 35m high, lies in the middle of the common entrance of the three inner branches of Igornachoix Bay. The W side consists of a bare, blackish cliff.

Port Saunders (50°39'N., 57°17'W.) is entered between Two Hills Point and Saunders Point, about 0.5 mile SE.

Ice.—Port Saunders freezes late in November. The ice breaks up between April 20 and May 10.

Tides—Currents.—The MHW interval at Port Saunders is 10 hours 26 minutes; spring tide rise 2m and neap tides rise 1.7m.

Depths—Limitations.—A Public wharf, 32m long, with an alongside depth of 3.7m, is located about 0.4 mile ENE of Two Hills Point.



Port Saunders



Port Saunders Light



Igornachoix Bay from 8 miles WSW of Keppel Island



Saunders Point

Aspect.—On the S side of the branch, the land is flat and low, having gradually descended from Hawkes Bay to the S. The granite at Hawkes Bay becomes limestone at Port Saunders.

Two Tree Hill (50°39'N., 57°18'W.), a wooded hill with a double summit, 75m high, rises over the N side of the branch in

a position about 0.8 mile NE of Two Hills Point; there is a fire tower and a conspicuous red framework tower nearby.

A church with twin spires stands on the N side of the entrance of Port Saunders; another church with a single spire stands about 0.5 mile NE of the first.

A hut stands on the S shore about 0.4 mile E of Saunders Point.

There is a hospital in the settlement.

A marine service facility is available at Port Saunders.

Anchorage.—Anchorage, in 12.8 to 26m, can be taken inside the entrance of Port Saunders and between the entrance and Montaignac Rock.

Anchorage can also be obtained S of Dunlop Spit, in 10.9m.

Directions.—Keppel Island Light Tower, open N of Saunders Point, and bearing 251° astern, leads N of Montaignac Rock. Vessels should steer about 124° between Montaignac Rock and Dunlop Spit, until Two Hills Point is in range about 271° with the N edge of the S shore. Anchorage may be taken on this range, in a depth of 11m.

Caution.—Montaignac Rock, which dries 0.9m, lies about 1 mile ENE of Saunders Point, and 0.2 mile off the S shore.

Dunlop Spit, whose extremity has a depth of 0.3m, extends about 0.3 mile SSE from Kent Point, a point about 1.7 miles E of Two Hills Point.

1.27 Keppel Harbor (50°38'N., 57°17'W.) is entered between Saunders Point and Keppel Point, about 0.8 mile SE. It may be approached from either side of Keppel Island.

The head of the harbor is shoal for about 0.5 mile; shoals, which extend 0.1 mile offshore in places, border the harbor shores.

Anchorage, in 20.1m, mud or sand, can be taken in the N approach to Keppel Harbor, between Morue Spit and Saunders Point.

Hawkes Harbor (50°37'N., 57°18'W.) is entered between Keppel Point and the shore about 1 mile SW. The NE side of the harbor is formed by the SW side of a peninsula, of which Keppel Point is the NW extremity and Lossieux Point, 1.4 miles SE, the S extremity.

Tides—Currents.—The tidal currents are strong in Hawkes Harbor and set strongly over the shoal flat between Lossieux Point and Robinson Island.

Depths—Limitations.—The fairway of Hawkes Harbor ranges in width from 550m at its mid-section to 180m at its S end. Depths of 10.9 to 35m are charted.

Anchorage.—Anchorage, in 22 to 35m, can be obtained with the SW end of Robinson Island bearing 129°.

Anchorage can also be obtained in the middle of Hawkes Harbor, about 0.8 mile SSE of Keppel Point, close W of the leading line, in a depth of 27m.

Caution.—From Keppel Point, the N side of Hawkes Harbor trends about 1.3 miles SE to Lossieux Point. Flats extend as far as 275m off the N portion of this shore.

Robinson Island, the N entrance point of Hawkes Bay, lies about 0.3 mile SSE of Lossieux Point, connected to it by a shoal flat with a greatest depth of 4.2m. Flats also extend 91m SW, and 365m E from Robinson Island.

1.28 Hawkes Bay (50°37'N., 57°13'W.) is entered between Robinson Island and the shore SW.

Tides—Currents.—The MHW interval at Hawkes Bay is 10 hours 50 minutes; the mean range is 1.2m and the spring range is 1.6m.

During flood tide, the current from the Torrent River sets toward the N shore.

Depths—Limitations.—Most of Hawkes Bay has depths of 18 to 37m; the controlling depth is 10.9m.

1.29 South shore of Hawkes Bay.—Ourson Point (50°37'N., 57°15'W.) lies about 0.8 mile ESE of Robinson Point.

Cible Point lies about 1.7 miles E of Ourson Point; a yellow cliff close S of Cible Point is conspicuous.

Gull Point lies about 0.5 mile ENE of Cible Point.

The Torrent River enters Hawkes Bay about 1 mile ENE of Gull Point.

A wharf, in ruins, extends from a long breakwater close N of the Torrent River. A conspicuous blue water tank, at an elevation of 51m, stands close E of the wharf; oil tanks stand adjacent to the water tank.

Caution.—A dolphin lies close S of the wharf; it is in an advanced state of disrepair and has protruding pipes. Mariners should exercise caution in this vicinity.

1.30 North shore of Hawkes Bay.—Cook Bank, with a least depth of 2.4m, lies 1.25 miles ENE of Robinson Island; the ruins of an abandoned whaling factory stand close NE of Cook Bank.

Aspect.—A pair of range lights is shown from the S shore of Hawkes Bay, in a position SSE of Robinson Island; the lights in line bearing 137°24' lead through Hawkes Harbor.

A red conical buoy is moored on the SW side of the 137°24' range, in a position 0.2 mile SW of the SW extremity of Robinson Island.

A lighted buoy is moored about 180m S of Robinson Island. **Pilotage.**—A pilot is available at Port Saunders.

Anchorage.—Anchorage can be obtained, in 13 to 37m, in the W part of Hawkes Bay. In the E part of the bay the current

from the Torrent River may be sufficiently strong to keep a vessel riding athwart a good breeze.

Vessels loading pulpwood anchor, in 7.3m, off Gull Islet and lay out stern moorings to ringbolts on the islet.

Directions.—To enter Hawkes Harbor, pass 0.15 mile S of Keppel Island, steering about 092°. When the leading lights close within the entrance to Hawkes Bay come into line, steer on this range.

To enter Hawkes Bay, steer with the range lights SSE of Robinson Island in line bearing 137°24', which leads through the harbor in a least depth of 10.4m. When the SW extremity of Robinson Island bears 056°, alter course E between the lighted buoy moored 0.1 mile S of Robinson Island and a buoy moored on the SW side of the channel. Proceed ENE into Hawkes Bay, passing SE of a buoy which is moored on the edge of shoals extending 0.15 mile E from Robinson Island. The least depth along this track is 8.3m.

1.31 Burntwood Point (50°34'N., 57°24'W.) lies about 4.3 miles SW of Spirity Point. A green bank, close within Burntwood Point, rises gradually in wooded ridges to 76m. The coast between Spirity Point and Burntwood Point is thickly wooded.

Bad Bay is entered between Burntwood Point and a point about 2.5 miles S. The bay is completely open and affords no shelter; its shores are bordered by shoal flats and should be given a berth of 0.5 mile. A conspicuous yellow cliff, 24m high, stands on the N side of the mouth of the Ponds River, a stream entering the head of Bad Bay. Temporary anchorage, in 18.3m, can be obtained off the mouth of this river. Heavy seas make this coast unapproachable in strong SW to N winds.

La Fontaine Point (50°29'N., 57°28'W.) lies about 4 miles SW of Bad Bay. About 0.8 mile S of La Fontaine Point, a high-topped bank displays a steep face, which is conspicuous when seen from the SW.

Table Point (50°22'N., 57°33'W.) lies 7.5 miles SSW of La Fontaine Point. It is bordered by low rocky ledges and backed by gradual wooded slopes.



Daniels Cove Light

Daniels Cove (50°14'N., 57°35'W.) lies on the N side of a small point. A breakwater, 75m long, shelters a small basin from NW winds. Daniels Cove Light is exhibited at an elevation of 16m from a tower 5m in height situated on the E side of the entrance to Daniels Cove.

Cliffy Point, rocky and backed by a bank 18m high, lies about 2.3 miles SSW of Daniels Cove Light. Close S of Cliffy Point there is a white stony beach backed by a green bank and then the rocky coast trends SSW for about 1.3 miles to Eastern Head, 14m high, rocky and bare on top.

1.32 Portland Creek (50°11'N., 57°37'W.) is entered from the head of Portland Cove, close S of Eastern Head.

Tides—Currents.—The mean range at Portland Creek is 1.1m; the spring range is 1.4m.

Depths—Limitations.—The 5m curve extends in places more than 0.3 mile offshore between the creek and a point about 2.5 miles SSW.

Aspect.—Gros Pate (50°12′N., 57°25′W.), about 8 miles E of Eastern Head, rises 645m. Gros Pate is truncated and has nearly vertical sides; the range of which it is a part continues about 4.5 miles NNE, terminating at East Hill, a 659m summit, about 8.8 miles inland.

Portland Hill (50°09'N., 57°37'W.), 2 miles S of Eastern Head, is thickly wooded and rises to 162m. Portland Hill is wedge-shaped when seen from the SW.

Anchorage.—Anchorage, in about 7.3m, mud and sand, poor holding, can be taken off the mouth of the stream draining Portland Creek Pond.

1.33 The Arches (50°07'N., 57°40'W.), lying about 2 miles SSW of the point W of Portland Hill, are detached masses of Limestone, honeycombed by the sea, and standing on a sandy beach.

Sandy Bay (50°02'N., 57°43'W.) affords temporary anchorage to vessels with local knowledge. The entrance to Parsons Pond, at the S end of the bay, is over a bar with a depth of 1.2m. A light is shown from the S entrance point to Parsons Pond.

A steep clay bank, conspicuous from seaward, extends inside the beach for 1 mile along the coast between Sandy Bay and Lower Head, about 5 miles SSW.

Shallow Bay (49°57'N., 57°45'W.) is entered between Low Head and Downes Point.

Depths—Limitations.—Shallow Bay has irregular depths of less than 9.1m.

The bay is fronted by Evangeline Banks, a series of rocky patches with a least depth of 3.6m.

White Rock Islets, lying close W of Downes Point and connected to it by a drying bank, extend about 0.5 mile N into the S entrance of Shallow Bay. White Rock Islets are a chain of drying and above-water rocks, the highest of which, 9.1m, lies near the middle of the chain. The SW part of the chain extends about 0.8 mile SW, sheltering Cow Head Harbor, the next bay S.

Stearing Island, sparsely covered with coarse grass, lies about 1.8 miles W of Downes Point; islets and rocks, which dry, extend about 0.3 mile W, N, and NE of the islet.

Aspect.—The shores of Shallow Bay are backed by wooded flats and marshes.

Anchorage.—The best anchorage for small vessels in Shallow Bay is N of Downes Point, in about 6.4m, close to the edge of the 5m curve. This position is defined by the whole of Stearing Island (49°55'N., 57°50'W.) and its rocks bearing about 256°, just open N of the NE grassy White Rock Islet.

1.34 Parsons Pond Hill (49°59'N., 57°44'W.), a conspicuous hill, rises 140m about 5 miles NNE of Cow Head.

Cow Head is a peninsula, densely wooded on its S and W sides and partially cleared on its NW side, connected with the mainland by an isthmus of sand and stones. The NW side of the peninsula is steep. Rocks which dry extend from its SW extremity for a short distance.

Cow Head Light is exhibited from a white tower 8m in height which stands near the NW extremity of the peninsula.



Cow Head Light

Cow Head Harbor (49°55'N., 57°50'W.), entered between Downes Point and the NE extremity of Cow Head about 1.25 miles SW, affords anchorage for small vessels drawing less than 3m, in depths from 4.6 to 6.4m, but in heavy weather there is not much shelter. The entrance channel is also narrow and tortuous between the rocks and local knowledge is essential. A small settlement stands on the shores of the harbor.

Cow Head has an L-shaped breakwater-wharf, 153m long and 52m in length at the outer face, with depths 3.4 to 4.3m alongside, which extends from the NE extremity of the peninsula.

Tides—Currents.—Inshore between Cow Head and Lobster Cove Head, about 20 miles SSW, there is usually a N current which attains a maximum velocity of 1.5 knots.

Caution is necessary in the vicinity of Stearing Island (49°56'N., 57°50'W.) in thick weather or at night, but by keep-



The Wharfs and Harbor at Cow Head

ing in depths of over 37m, a vessel will pass 0.5 mile W of the dangers.

The tidal currents are strong between Stearing Island and the mainland. The N and stronger current sometimes attains a velocity of 2 knots. The duration of the N current is much longer than that of the S current.

1.35 Cow Cove (49°55'N., 57°48'W.), on the S side of Cow Head, has depths of 7 to 18m in its outer part. Its inner part has depths of 9.1m or less for almost 0.5 mile from its head. Cow Cove affords shelter from winds E of NW. During the N gales prevalent in spring and autumn, good anchorage, in 7.3 to 18.3m, can be obtained. In all W winds, a heavy swell rolls in and renders the anchorage unsafe.

Between Cow Head and Lobster Cove Head, a distance of 20 miles, the mountains behind the coast, broken by steep gorges, present a very rugged, barren aspect from seaward.

St. Pauls Bay is entered between **St. Pauls Point** (49°52'N., 57°50'W.) and Broom Point, about 3.25 miles SSW. The bay is open and anchorage here is unsafe in the strong, frequent breezes. Depths in the bay range from 9.1 to 18.3m.

Western Brook enters the sea through a sandy beach close SE of **Broom Point** (49°50'N., 57°53'W.). Shoals with depths of less than 5.5m border the sandy beach as far as 640m offshore. The sea is frequently discolored to the edge of the shoals by the outlet of Western Brook.

The Brandies (49°58'N., 57°54'W.) are a group of shoals which are steep-to on their WNW side. The sea usually breaks on The Brandies' shallowest part, which has a depth of 3.7m, with a swell from the WNW.

Western Brook Hill, a conspicuous, wedge-shaped summit, rises to 553m about 4 miles ESE of **Martin Point** (49°46'N., 57°54'W.). The hill rises on the S side of a gorge, both sides of which appear almost vertical.

The coast from Martin Point to Gun Point, nearly 3 miles SSW, consists of a boulder beach backed by a low, wooded bank; it is bordered by a shoal bank extending about 0.4 mile offshore. Numerous rocky shoals also front this part of the coast, including Gun Point Shoals.

Directions.—Martin Point, in line bearing 206° with Gun Point (49°43'N., 57°57'W.), leads through the passage between The Brandies and the coast.

The Whaleback (49°46'N., 57°56'W.), a narrow ridge of sunken rocks, has depths of 2.7 to 3.7m. A small mushroom-shaped rock that dries 1.2m lies in the middle part of The Whaleback.

Directions.—Parsons Pond Hill, in line with the E part of Cow Head and bearing 037°, leads NW of the shoals between Broom Point and Gun Point.

1.36 Crag (49°32'N., 57°58'W.), 591m high, on the S side of the entrance of Bonne Bay, open W of Green Point and bearing 179°, leads W of the above-mentioned shoals.

Green Point (49°41'N., 57°58'W.) is a projecting, flat-topped, grass-covered cliff. Green Cove, located close S of Green Point, is shallow and unfit for anchorage. Between Green Point and Lobster Cove Head, 4.75 miles S, the coast is low and bordered by a stony beach, from which a shoal bank extends as much as 0.1 mile offshore.

Berry Head, about 2.5 miles S of Green Point, is a slight projection off which overfalls and tide rips frequently occur when the ebb is running strongly out of Bonne Bay.

Berry Hill, conspicuous from seaward, rises to 145m about 1.4 miles NE of Lobster Cove Head. Berry Hill is dome-shaped and wooded.



Lobster Cove Light

Lobster Cove Head (49°36'N., 57°57'W.) is the NW extremity of a broad promontory faced with red cliffs, 10.6m high. A light is shown from a white tower on the headland.

Bonne Bay

1.37 Bonne Bay is entered between Lobster Cove Head and Western Head, nearly 4 mile SW.

Winds—Weather.—East gales, which are infrequent in Bonne Bay, are generally accompanied by thick rainy weather. In strong E winds, violent squalls blow down from the mountain gorges.

Southwest winds prevail in June, July, and August. Northwest winds prevail in the autumn, but there have been occasional short intervals of E winds.



Courtesy of Welcome to Newfoundland

Bonne Bay

Ice.—Bonne Bay never freezes until the drift ice appears, generally about mid-January. The bay is then completely closed by thick ice until about mid-April, when the drift ice disappears. However, ice on the coast occasionally blocks the bay until the end of June. The first vessel arrives early in May, and the last leaves at the end of December.

Tides—Currents.—Overfalls and tide rips frequently occur off the N side of the entrance of Bonne Bay.

Depths—Limitations.—In the N approach to Bonne Bay, depths of 14.6 to 37m are found on the tail of the rocky coastal bank extending W from Green Point. Bonne Bay has midchannel depths of 110 to 146m in its outer 6 miles, 46 to 128m in South Arm, and 37 to 230m in East Arm. The Tickle has a least depth of 42m in mid-channel and 11.9m in its W approach.



Bonne Bay

Aspect.—The shores of Bonne Bay rise steeply to high timbered hills. A conspicuous range of mountains extends N from Deer Arm. About 3 miles NNE of the head of Deer Arm, Gros Morne (49°36'N., 57°48'W.) rises to a height of 774m.

Outer Part of Bonne Bay—Northeast Side

1.38 Rocky Harbor (Roche Harbor) is entered between Lobster Cove Head and Salmon Point, a narrow, bare, slate point about 1.5 miles SSE. There are landing places for boats and a small wharf, in ruins, at Rocky Harbor.

Depths—Limitations.—There are general depths of 9.1 to 18.3m in the middle of Rocky Harbor.

A flat ledge of stones and boulders, which dries 0.3m to 1.2m, extends about 0.4 mile NW into the harbor from a point about 0.4 mile NE of Salmon Point. Foul ground borders this ledge and extends 0.25 mile from its W side.

The remaining shores of Rocky Harbor are, with the exceptions of The Bottom and Bear Cove, entirely bordered by rocky ledges and foul ground which extend 360m offshore in places.

Anchorage.—Anchorage, in 10.9 to 12.8m, can be obtained off the S shore of Rocky Harbor with the SW extremity of Lobster Cove Head bearing 305°, and Salmon Point in line bearing 215° with the point 0.35 mile NE of it. The anchorage is good except in strong winds between SW and NW, when a heavy sea is raised.

Directions.—Rocky Harbor may be entered with the N summit of Gros Morne in line bearing 088°30' with a saddle-shaped, wooded, coastal hill. This range leads S of the shoals off the N shore of the harbor. When abeam Woody Cove, about 0.5 mile E of Lobster Cove Head, steer 115° for the anchorage.

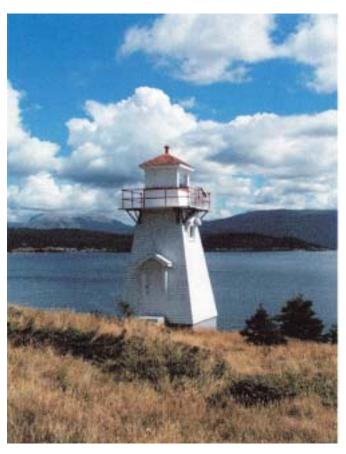
Salmon Point is a narrow, bare, slate point; from it the coast, consisting of slate cliffs backed by thickly-wooded hills, trends about 3.8 miles SE to Wild Cove Head. Wild Cove Head is dark, rocky, and wooded. An extensive, stony, flat borders the shore between the S side of Wild Cove Head and Norris Point.

Sandy Head (49°31'N., 57°53'W.), 23m high, is located 0.5 mile SE of Wild Cove Head. The point is conspicuous, appearing steep, bare, and sandy from the W. Norris Point lies just under 0.5 mile SE of Sandy Head. Sandy Head and Norris Point are the W and S extremities, respectively, of a peninsula which rises on its E side to a wooded conical peak.

The Tickle is the narrow channel leading into East Arm between Norris Point and Gadds Point, 0.5 mile to the SSE. There is temporary anchorage in good weather, in depths of 11 to 12.8m, about 0.4 mile WSW of Gadds Point.

Outer Part of Bonne Bay—Southwest Side

1.39 Midway between Western Head and Eastern Head, about 1.5 miles E, a rock dries 0.6m about 230m offshore. Vessels should give the shore in the vicinity of the drying rock a berth of at least 365m.



Woody Point Light

Between Eastern Head and Woody Point, about 4.5 miles SE, the land rises in high, wooded cliffs and steep slopes to a conspicuous, vertical cliff. The vertical cliff terminates 0.75 mile inland at Crag, rising 1.75 miles SSE of Eastern Head. A

perpendicular rock, 268m high, rises about 0.8 mile NE of Crag and overlooks the shore. The rock is conspicuous from the N and E. The shore between Eastern Head and a position about 0.8 mile from Woody Point may be closely approached; thence to Woody Point, the shore is fronted by shoal flats. Woody Point is marked by a light shown from a white tower.

The settlement of Woody Point stands in the vicinity of the point. Conspicuous among the buildings at the village are the Roman Catholic Church and the Episcopal Church, situated within 0.5 mile SSW of Woody Point. A conspicuous white cross stands close S of the Roman Catholic Church.

Anchorage.—Temporary anchorage, in 21.9 to 37m, can be obtained about 0.4 mile S of Woody Point. However, the bank on which these depths lie is narrow and steep, and the bay itself is subject to sudden and violent squalls during strong winds.

Submarine cables are laid between Woody Point and Norris Point. Anchorage is prohibited in this area.

Inner Part of Bonne Bay

1.40 The Tickle, the channel leading to East Arm, lies between Norris Point and Gadds Point, about 0.3 mile SSE. The Tickle has a least width of 0.2 mile between the 9.1m curves. It is clear of dangers except for a patch, with a depth of 0.3m, about 320m WSW of Norris Point and a rocky ledge extending 90m S from Norris Point.

Gadds Point, the S entrance of The Tickle, is a rounded, steep-to headland. The point is marked by a light shown from a skeleton tower.

Tides—Currents.—The MHW interval near The Tickle is 10 hours 30 minutes.

Tidal currents generally set fairly through The Tickle, in and out of East Arm. During spring tides, the current attains a considerable velocity.

Directions.—The light tower on Woody Point bearing 250°, seen midway between the 341m and 381m peaks about 1.3 miles WSW of Woody Point, leads through The Tickle.

Gadds Harbor, on the SE side of Gadds Point, affords anchorage for small vessels, close inshore.

Neddy Harbor is entered between Burnt Point, lying about 640m ENE of Norris Point, and Shoal Point, about 0.5 mile farther NE. Neddy Harbor, which has depths of 10.9 to 12.8m, mud, in its inner portion, is the most convenient and probably the best anchorage in Bonne Bay. It is sheltered from all except SE winds. In SE winds, severe squalls occur and a sea quickly rises. Vessels of any size should moor, for the space within the harbor is limited.

Inner Part of Bonne Bay—East Arm

1.41 The land on either side of East Arm is high. Parts of the NE side of the arm are bare and stony, but the SW side is densely wooded. A conspicuous, conical peak (49°30'N., 57°46'W.), 651m high, rises in stony slopes from the NE side, about 4 miles within the entrance.

Northeast side of East Arm.—Deer Arm is the N projection of East Arm. There is no anchorage in Deer Arm. Seal Cove, on the NE shore of East Arm, 1.5 miles E of Tuckers

Head, provides anchorage for vessels. In strong W winds, the squalls are heavy and the resulting sea is inconvenient.

South of Seal Cove a deep narrow passage leads into South East Arm. This basin provides sheltered anchorage, in a depth of 24m.

Southwest side of East Arm.—Shag Cliff, about 0.8 mile E of Gadds Point Light, on the S side of the entrance to East Arm, is a grey cliff, 119m high. Storehouse Point, about 0.5 mile E of Shag Cliff, is a low grassy projection. Tuckers Head, located on the SW side of the arm, 4 miles SE of Storehouse Point, rises to an elevation of 128m. A boat wharf is situated at Lomond Cove, about 0.4 mile SE of Tuckers Head; wharf ruins extend about 10m NW of the outer end of the wharf.

Inner Part of Bonne Bay—South Arm

1.42 South Arm winds about 4 miles S from abreast Woody Point. Around the head of South Arm, the shores are low and flat. A drying mud flat, the edge of which is very steep-to, extends nearly 0.5 mile from the head of the arm. Anchorage can be obtained, in 37 to 46m, near the head of the arm, but it is not recommended because of the heavy squalls which occasionally occur.

Tides—Currents.—In South Arm, the direction of the ebb current is not regular, apparently being checked by the current through The Tickle.

Western Head (49°33'N., 58°01'W.), the S entrance point of Bonne Bay, appears from the W as the N termination of the high land to the S.

Between Western Head and Cape Saint Gregory, about 13 miles SW, lie occasional steep slopes and conspicuous red cliffs from low, grass-covered headland. In summer the bright green grass of the headlands contrasts strongly with the spruce-covered hills above.

Trout River Rock, a 24m patch, lies 2.25 miles WNW of the N entrance point of Trout River Bay. Fishing vessels anchor near the patch in good weather.

Trout River Bay, whose N entrance point lies 5.75 miles SW of Western Head, is about 0.5 mile wide at its entrance, and extends 0.5 mile SE to its head. The bay has general depths of 12.8 to 16.4m in its entrance and 5.5m or less for 0.5 mile from its head.

Trout River Light is shown on the S entrance point of Trout River Bay.

Anchorage, in 16.4 to 18.3m, can be obtained off the middle of the entrance of Trout River Bay. Small vessels can anchor farther in, but there is usually a heavy ground swell during onshore winds.

Big Cove Head lies about 2 miles SW of Trout River Bay. A rocky 18.3m patch lies about 0.8 mile WSW of the head. Fishing vessels frequently anchor on the patch in good weather.

Heavy weather produces a very confused sea in the vicinity of **Cape Saint Gregory** (49°24'N., 58°14'W.) and small vessels should keep at least 2 miles offshore. Near Rencontre Cove, lying about 1 mile NNE of Cape Saint Gregory, a conspicuous cliff, nearly 305m high, recedes a little from the coast and terminates in a series of white, rocky hills.

Chimney Cove Head, a slight projection, 158m high, with a perpendicular cliff on its SW side, lies about 6 miles S of Cape



Cape St. Gregory from SW, distant 3 miles

Saint Gregory. The E side of Chimney Cove Head is a conspicuous green slope.

Chimney Cove lies close S of Chimney Cove Head. Vessels can anchor, in 21.9 to 25.6m, off Chimney Cove during SSW winds.

North Head, a red earth cliff, lies about 4 miles S of Chimney Cove. Mt. St. Gregory rises to 686m about 2 miles ENE of North Head. This mountain shows three distinct summits from the W, but from the S appears as a single sharp peak.

The Bay of Islands

1.43 The Bay of Islands is entered between North Head and South Head, about 11 miles SSW.

Ice.—The arms of the the Bay of Islands generally freeze between December 20 and January 20. The ice breaks up suddenly between April 20 and May 10. Drift ice clears away early or late in May, according to the season.

Tides—Currents.—No set rule has yet been found for the action of the tidal currents in the Bay of Islands. Limited observations made a number of years ago showed that during May, June, and July the surface current in Humber Arm set almost continuously seaward, while an undercurrent set in the opposite direction. The W surface current was split by Woods Island and attained a velocity of nearly 1.5 knots over the shoal off Peter Point on Woods Island. The SE current converged to Humber Arm around Woods Island, its velocity decreasing on the surface as it neared the Humber River.

Tidal currents through the narrows of Goose Arm attained a velocity of 2 knots at springs. The time of the turning of the currents was irregular with respect to HW. It varied with the direction of the wind and the amount of water flowing into the head of the arm from the currents.

Close to all shoals and banks, and especially at Vesuvius Rock off the NW end of Woods Island, the current occasionally attained a velocity of 1.5 knots. It was scarcely perceptible 0.3 mile from these features.

Depths—Limitations.—Channels with more than 16.4m lead between the islands in the entrance of the Bay of Islands. In the outer part of the bay, the depths range from 28m to over 183m; in the arms, depths range from 37m to over 183m.

Aspect.—A conspicuous cascade falls over dark cliffs about 0.5 mile S of North Head.

The Green Handkerchief is a grassy patch on a cliff about 1.25 miles S of North Head. This conspicuous patch is bright green in summer and yellowish in spring and autumn.

Lark Mountain rises to 431m about 2 miles S of Southern Head.

Blow-Me-Down, 645m high, rises on the S side of the bay at the NW end of a high range of mountains which trends SE. Blow-Me-Down drops almost vertically from its summit. **Caution.**—In autumn, large numbers of herring nets are laid in the arms of the bay and around Woods Island, which lies at the entrance of Humber Arm. The nets are always laid parallel to the shore and usually in a depth of 5.5m.

Islands and Dangers in the Entrance of the Bay of Islands

1.44 Brandies Rocks (49°17'N., 58°17'W.), which break in a slight swell, lie about 1.8 miles SW of North Head.

Gregory Island (49°17'N., 58°18'W.), 76m high, is the northernmost of the islands in the entrance to the Bay of Islands.

Saddle Island lies about 5 miles SW of North Head; a 45.7m high, square pillar, conspicuous from the E or W, stands on the NW side of the island.

Green Island (49°14'N., 58°20'W.), located about 0.8 mile S of Saddle Island, rises to a round hill 133m high.

Hen Island, rising to a round hill 71m high, lies about 0.5 mile SW of Green Island.

Tweed Island (49°13'N., 58°20'W.), 221m high, lies 0.75 mile S of Green Island. Little Shag Rock, 2.7m in elevation, lies E of the SE extremity of Tweed Island.

Grassy Island and Hat Rock lie on foul ground at the SE end of Tweed Island. Vessels with local knowledge can obtain temporary anchorage, in 16.4 to 21.9m, in a cove between Grassy Island and Hat Rock or, in 14.6 to 20.1m, off the cove W of Hat Rock. West winds, however, quickly cause a heavy sea

Guernsey Island lies about 2 miles N of Southern Head. A cairn stands about 320m SE of the summit of the island; a few trees stand at its SE end.

Pearl Island lies about 1 mile E of Guernsey Island; four pillars, the highest 182m, stand on the N side of a deep valley lying on the NE side of the island.

Cloue Patches consist of several sunken rocks lying within 1 mile SW of Shivery Point, the N extremity of Pearl Island.

Shag Rocks consist of two groups lying within 1.25 miles SE of the SE extremity of Pearl Island.

Outer Part of the Bay of Islands—North Shore

1.45 North Head (49°19'N., 58°15'W.) is a red earth cliff, 16.4m high, fronting a marshy plateau at the foot of Mt. St. Gregory. The plateau is usually green in summer.

Beverly Head lies about 1.7 miles S of North Head. Davis Cove is entered about midway between The Friar, a 12.2m high rock, lying about 1 mile SSE of Beverly Head, and the 4.5m high Lower Gull Rock, lying about 0.5 mile farther SSE. Davis Cove is frequented by fishing vessels in summer.

Crabb Point, about 5.5 miles SSE of North Head, rises in dark cliffs to a small wooded hill, 65m high.

Buck Head is located 2 mile E of Crabb Point. Parkes Rock, an 8.2m shoal, lies about 1 mile SSE of Buck Head.

Stowbridge Head, the N entrance point of North Arm, lies about 4.3 miles ESE of Crabb Point; it is a square mound, 26m high, rising on the W end of a small shingle beach. A few houses stand on the beach.

White Scrape is a conspicuous mark on a steep, 305m hill-side, about 0.8 mile NW of Stowbridge Head.

Outer Part of the Bay of Islands—South Shore

1.46 South Head (49°09'N., 58°22'W.) rises in steep black cliffs from several pinnacles of light-colored rock at its base. The Monkey, the highest of these, is 33m high. In S or W winds, heavy squalls sweep down on the head from the Murray Mountains to the S. A light is shown from the headland.

White Point, marked by a light, is located 0.75 mile ESE of South Head.

Lark Harbor is entered between Fleming Point, about 2.3 miles ESE of Southern Head, and Tortoise Point, about 0.7 mile SSE. Tortoise Point is the N extremity of a promontory of which Tortoise Mountain, 240m high and wooded, is the highest point. A light is shown from the point.

Depths in the entrance of Lark Harbor are over 55m. At the bend of the harbor the depths are 7.3 to 10.9m, and in the inner reach 9.1 to 21.9m.

There is a public wharf extending 27m from shore to an outer end 27m long, with depths of 3.4 to 4.3m alongside.

Shoals and drying flats extend W to the head of Lark Harbor from a position 0.25 mile SE of Low Point. The foul ground reaches 0.25 mile offshore in places. Similar ground fronts the opposite S shore to a distance of 230m offshore in places. A rock, 1.8m high, lies close off Pinnacle Point, a point 0.35 mile SW of Tortoise Point.

Anchorage.—Anchorage, in 18.3m, can be taken in the outer part of Lark Harbor, with Rocky Point bearing 156° and the 1.8m rock off Pinnacle Point bearing 058°. Another anchorage, in 11.9m, is in the inner harbor, about 595m S of Low Point, where the holding ground is good.

East winds send in a little sea to the above-described anchorages. During S and SW winds, heavy squalls sweep down from the mountains.

York Harbor is entered between Tortoise Point and the coast at the foot of Blow-Me-Down, about 3.5 miles SE. Governor Island lies about in the middle of the bay and the small Seal Island lies 0.25 mile E.

A sandspit extends about 275m NW from Sword Point (Sand Point), the W extremity of Governor Island. Depths of less than 10.9m extend almost 0.5 mile NNW from the shore 0.5 mile ENE of Sword Point, and for about the same distance SW from the shore 0.5 mile S of Sword Point. Seal Island is nearly connected with the E extremity of Governor Island by a bank. Rocks, awash, extend about 180m E from Seal Island; a depth of 10.9m lies 0.5 mile E of the island. Between this depth and the rocks, awash, there is a depth of 4.5m, close S of which 7.9m is charted.

Sheltered anchorage, in 10.9 to 20.1m, can be obtained in York Harbor, between the SW end of Governors Island and the mainland. During S winds, heavy squalls sweep down from Blow-Me-Down.

1.47 East of York Harbor, the coast rises in a steep wooded slope to the base of Blow-Me-Down Cliffs. Blow-Me-Down Brook flows into the sea about 1.5 miles E of York Harbor. A small yellow rock, 2.4m high, lies about 0.4 mile W of the mouth of Blow-Me-Down Brook, close off the coast. Temporary anchorage can be taken about 0.3 mile off the mouth of the brook.

Frenchman's Cove is entered about 3.5 miles E of York Harbor, it is steep-to on its W side but its SE side is bordered by sandflats and boulders.

There is an L-shaped Public wharf, 52m long, with an outer face 21m in length and an alongside depth of 9.6m. A private wharf, 19m long at its outer face and with alongside depths of 2.3 to 3.7m, is close S of the Public wharf.

Anchorage, in 20.1 to 24m, mud, can be obtained off the shingle flat at the head of the cove. Pilots for Corner Brook are boarded off Frenchman's Cove. The MHW interval at Frenchman's Cove is 9 hours 50 minutes; the mean range is 1.1m and the spring range is 1.4m.

Frenchman's Head (49°04'N., 58°10'W.), the SW entrance point of Humber Arm, rises to an earth cliff, 13.7m high. Several conspicuous, detached, conical peaks from 315 to 320m high rise about 2 miles SSW of Frenchman's Head. A light is shown about 0.5 mile SE of Frenchman's Head within the entrance to Humber Arm.

Outer Part of the Bay of Islands—East Shore

1.48 Woods Island (49°06'N., 58°12'W.) is located close outside of the entrance to Humber Arm, with Peter Point, its SE end, located about 5 miles E of Seal Island. The island is partially wooded and a range of hills 75m high are at the NW end. A light shown from the SW side of the island.

Woods Island Harbor (49°06'N., 58°13'W.) indents the SW side of Woods Island. The harbor is available only to small craft.

The **Puffin Islands** (49°07'N., 58°14'W.) are two islands, 23 and 27m high, that extend over 0.5 mile NNW of the NW point of Woods Island. Outer Shag Rock (Black Rock), a dark islet 6.1m high, lies about 0.8 mile E of the NW Puffin Island.

Sleep Island, 22m high, lies almost 0.3 mile off the W side of Woods Island.

Man O'War Shoal, a dangerous sunken rock with a depth of less than 1.8m, lies a little more than 0.5 mile NW of the NW Puffin Island (49°08'N., 58°14'W.).

Vesuvius Rock (49°08'N., 58°15'W.) has a depth of 0.5m, 275m SE of which there lies a shoal with a depth of 3m.

Directions.—Woman Point, on the N Side of Middle Arm about 3 miles within the entrance, open N of Black Head, and bearing 088°, leads N of Man O'War Shoal.

Between **Northern Head** (49°09'N., 58°07'W.) and North Arm Point, about 1.8 miles N, the coast is striped with quartz in places.

Eagle Island (49°10'N., 58°09'W.) consists of steep cliffs composed of striped vertically-striped red and gray rock. A conspicuous mass of sandstone projects from the shore near the N end of the island.

Fisherman Rock, with a depth of 0.6m, lies nearly 0.8 mile SSW of North Arm Point.

Middle Arm Point (49°08'N., 58°09'W.) is formed of small steep-to cliffs rising to a wooded range, 19m high. A pinnacle rock and a waterfall are located close S of the point. A light is shown from the point.

The Bay of Islands—North Arm

1.49 North Arm is entered between **Stowbridge Head** (49°13'N., 58°05'W.) and North Arm Point, about 2 miles SSW. Small vessels can obtain anchorage, in 26m, in the middle of North Arm Cove, lying close E of North Arm Point, but the anchorage is not good. Depths decrease quickly near the shore. Only small vessels can anchor conveniently in the inner part of North Arm.

The Bay of Islands—Middle Arm

1.50 Middle Arm is entered between Northern Head and Black Head, about 1.5 miles SSW. Black Head is located about 0.8 mile ENE of Middle Arm Point.

Penguin Head (49°09'N., 57°59'W.), about 5 miles E of Northern Head, rises to a bare grey hill, 319m high. At Penguin Head, Middle Arm divides into Penguin Arm and Goose Arm.

Jennings Cove, about 2 miles ESE of Black Head, affords anchorage, in 18.3 to 25.6m, in the middle of the cove. However, the shores of the cove are foul and 180m from the head the depths shoal rapidly.

Cox's Point is the E entrance point of Jennings Cove and the W entrance point to Cox's Cove.

Cox's Cove lies about 1 mile SE of Jennings Cove. Temporary anchorage, in 29m, can be obtained in Cox's Cove, but a considerable sea sets in during E winds.

Parkes Cove, about 1.5 miles SE of Cox's Cove, affords anchorage is 31m, about 0.4 mile offshore. The depths decrease gradually from the anchorage to the shoal flats extending off the beach.

Goose Arm is entered between Penguin Head and Long Point, about 0.7 mile SW. Anchorage, in about 26m, can be obtained 275m off the head of the cove, but the holding ground is not good.

Penguin Cove, on the N side of Goose Arm, about 0.8 mile E of Penguin Head, is clear of dangers. Anchorage, in about 25.6m, can be obtained 275m off the head of the cove, but the holding ground is not good.

An unnamed cove in the S shore of Goose Arm, about 2.8 miles ESE of Long Point, is marked by two conspicuous land-slides in the red cliffs of its shores.

The Narrows constrict Goose Arm to a width of about 180m. They are formed between Raglan Head, rising almost vertically from the shore on the SE side to a summit, 329m high and a peaked hill, 186m high, on the NW side.

Sugar Loaves (49°12'N., 57°49'W.), several detached summits, rise about 2.3 miles NE of William Wheeler Point. One summit, 252m high, is a good landmark for navigating The Narrows.

Directions.—To transit The Narrows, steer with the 252m summit in the Sugar Loaves in range 050° with the NW ends of William Wheeler Point and Raglan Head. This range leads between the shoal flats on either side of The Narrows. When the landslides in the cove SW of The Narrows are in line bearing 201° with the boulders close off the W side of Raglan Head, steer for the middle of the arm.

Penguin Arm is entered on the N side of Penguin Head. The arm is very deep and free of dangers. There is no anchorage except for small craft.

The Bay of Islands—Humber Arm

1.51 Humber Arm is entered between McIvers Point (49°05'N., 58°08'W.) and Frenchman's Head, about 1 mile SW. Strong winds blow up and down the arm.

Ice.—Humber Arm freezes about December 26 and clears at the end of April. The first vessel arrives about May 12 and the last leaves about January 1.

1.52 North side of Humber Arm.—McIvers Island, a bare rock 4.6m high, lies about 0.8 mile SE of McIvers Point. Rattler Brook forms a conspicuous waterfall about 0.7 mile SE of McIvers Island. Anchorage, in about 37m, can be obtained 0.3 mile offshore, between McIvers Island and Rattler Brook.

Big Head (49°03'N., 58°07'W.) is a conspicuous gray-faced steep cliff that rises to a dark wooded hill.

Gillams Brook enters the head of **Gillams Cove** (49°01'N., 58°04'W.). Small vessels can anchor, in 21.9m, with the SW extremity of the land S of the cove bearing 158° and the mouth of the brook bearing 038°.

Meadows Point lies about 4.5 miles SE of Big Head. It is low and flat, rising gradually to a hill, 61m high. A light is shown from the point.

Anchorage can be obtained in the entrance of **Petipas Cove** (48°59'N, 57°59'W.), in 24 to 37m, sand and mud, very good holding ground. This is the anchorage for Corner Brook and is stated to be the best in Humber Arm. However, the edge of the shelf is steep-to and, in N winds, the anchorage becomes unsuitable.

1.53 South side of Humber Arm.—Benoit Cove lies about 3.5 miles SSE of Frenchman's Head. A large warehouse stands near the E part of the cove. Anchorage, in 18.3 to 31m, can be obtained about 180m offshore in the cove.

Halfway Point lies about 1 mile SE of Fox Point, the E entrance point of Benoit Cove. The best anchorage in the NW part of Humber Arm can be obtained, in 18.3m, about 0.2 mile offshore between Fox Point and Halfway Point, or in 37m, 0.3 mile offshore.

Directions.—The house on the W side of Cooks Cove, about 2.8 miles SE of Fox Point, open NE of Halfway Point, and bearing 141°, leads NE of the reef NW of Halfway Point.

Bannatyne Cove (48°58'N., 58°02'W.) is separated from Pleasant Cove on the E by a blunt point. Small vessels with local knowledge can anchor, in 18.3m, about 180m off Bannatyne Cove and Pleasant Cove.

Petries Point is the E entrance point of Pleasant Cove. The Roman Catholic Church, a white building with two spires, is conspicuous in the village on Petries Point.

1.54 Head of Humber Arm.—Tucker Point (48°59'N., 57°56'W.) lies about 0.8 mile W of Hughes Brook. Wild Cove lies in the middle of the head of Humber Arm. Vessels with local knowledge can obtain good anchorage, in 16.4m, with Hughes Brook bearing 038° and the extremity of the N shore of Wild Cove bearing 105°. About 180m NE of this position there

are depths of 9.1m. The currents setting out of Hughes Brook and the Humber River keep a vessel anchored in this position broadside onto a fresh W breeze.

Caution.—A submarine cable and a dangerous sunken wreck lie in the vicinity of the above-mentioned anchorage.



Conner Brook



Conner Brook Paper Mill

Corner Brook (48°57'N., 57°57'W.)

World Port Index No. 1830

1.55 The port of Corner Brook is situated on the S side of the head of Humber Arm, approximately 21 miles from South Head; it consists of a city with a small natural harbor.

The Corner Brook waterfront extends along the S shore of Humber Arm for approximately 5.2 miles W from Humbermouth. There are no off-lying shoals near the approaches. There is wharfage operated by the Harbor and Ports Directorate, Transport Canada for general cargo, in addition to private wharves for handling forest products, cement, oil, and caustic soda.

Winds—Weather

Corner Brook is sheltered by the surrounding hills; in summer, strong winds are rare.

Fog seldom penetrates the Bay of Islands beyond Frenchman's Head.

The average rainfall at Corner Brook is 762mm a year, with the rainy season occurring from September to November.

All wharves are exposed to NW gales. Small vessels should seek shelter from these gales in Pettipas Cove. It is recommended that vessels drop an anchor when coming alongside the berths.

Ice

The navigation season of Corner Brook is dependent upon ice conditions in the Gulf of St. Lawrence; however, cargo is moved regularly from Corner Brook through the Gulf of St. Lawrence all winter with Canadian Coast Guard icebreaker assistance. Past opening and closing dates for the port are, as follows:

- 1. Earliest opening-March 19.
- 2. Latest opening-May 9.
- 3. Earliest closing-January 3.
- 4. Latest closing-February 11.

The Bay of Islands has occasionally been kept open by government icebreakers until the port of Corner Brook is closed. However, no local icebreaker service is available. The maximum ice thickness is 0.6m. In recent years, ice has not closed Humber Arm to navigation.

Tides—Currents

The spring tidal rise at Corner Brook is 2.0 to 2.3m; neaps rise 1.5m.

The strength of the current is said to vary with the wind direction. A strong seaward current, greater in strength than the tidal current, has been noted in an E wind. In the Curling area of Corner Brook, a 4 knot current was reported; in the Humbermouth area, a current of 3 knots was reported.

Depths—Limitations

Depths in Humber Arm, off the port of Corner Brook, range from 73 to 110m. At the Corner Brook Anchorage in Pettipas Cove, the depths are 24 to 35m. At the anchorage off Curling, the depths are 14.6 to 37m. At the anchorage off Humbermouth, the depth is 46m.

A spit extends about 230m NNW into Humber Arm from a position near the W end of Bowaters Wharves in the central section of Corner Brook. The spit is 2.4m high and 55m wide.

A vessel 189m long, with a draft of 9.8m, is the largest that can enter the port and berth at Bowaters Berth No. 4.

Bowaters Wharf, which fronts the paper mill, has a continuous frontage of 516m divided into four berths. Vessels usually berth starboard side-to at Berth No. 1 and port side-to at the other berths. Berth No. 1 is the E berth; it is aligned in a SE-NW direction and is 184m long, with depths alongside from 4.9 to 10.7m. Berth No. 2 and Berth No. 3 are continuous, each being 107m long, with general depths alongside from 8.5 to 9.4m. Berth No. 4 is 122m long, with depths alongside from 3.4 to 11m. Oil, caustic soda, sulfur, limestone, and coal are discharged.

All the berths at Bowaters Wharf are supplied with electrical power and fresh water and are served by railway trucks.

Imperial Oil Wharf lies close E of Petries Point. It is T-shaped, with a berthing length of 47m, and has a least depth of 7.9m alongside.

Irving Oil Wharf is 365m SE of Petries Point. It is 91m long and has a depth alongside of 12.8m.

Gulf Oil Wharf lies 1.35 miles E of Petries Pointt is 41m long and has depths alongside from 5.2 to 6.7m.

The Department of Transportation Wharves provide a total berthing length of 366m. Depths alongside range from 7.9m at the E and to 11.3m at the W end. General cargo is handled at this wharf.

Aspect

Among the structures at Corner Brook, conspicuous from seaward are:

- 1. The Anglican Church, a white building with brown roof and spire, situated in the E end of Curling.
 - 2. The 55m chimney of the Bowaters Mill.
- 3. The Anglican Church situated 366m SE of the mill chimney.

A diamond-shaped, white daymark is visible on the roof of a shed situated close E of Bowaters Wharves.

Pilotage

Pilotage is compulsory. Vessels desiring a pilot should send their ETA in GMT at the boarding station off Frenchman's Head 12 hours in advance to the Atlantic Pilotage Authority. Confirm or amend the time not less than 4 hours before arrival. Ships can communicate direct with the pilot boat "Glenkim" by radiotelephone if required. It is reported that during the ice season the pilot boards by tug about 1 mile from the main berths. The pilot station is located at Frenchman's Head.

Anchorage

Masters are requested to contact local pilots regarding anchorage, as a submaine cable enters the waters of Humber Arm at Wild Cove and continues out of the bay through Frenchman's Head and South Head.

There are good anchorages in the outer bay. The best anchorage at Curling is in 14.6 to 29m, mud, about 180m off Baggs Wharf, situated about 0.3 mile ESE of Spruce Point.

A moderate-sized vessel can ride here to about 2.5 shots of chain, but it is advisable to moor if the season is late or the stay prolonged.



Corner Brook Paper Mill

The most convenient anchorage in Corner Brook Harbor is off Pettipas Cove, in depths of 24 to 37m. The holding ground of sand and mud is good. Small vessels are advised to seek shelter here.

Anchorage off the wharves in central Corner Brook can be taken, in 55 to 73m, stiff mud, about 0.3 mile N of Western Terminals Wharves. Two large vessels can be accommodated. The holding ground is excellent, except in E winds. There is anchorage close inshore for one vessel, in 28 to 37m, in the small bay close N of Western Terminals.

Vessels anchor off Humbermouth, in 46m.

The anchorages off the central and E parts of Corner Brook are strongly affected by winds and current, and by ice from the rivers entering Humber Arm.

Caution

A submarine cable, lying in an ENE-WSW direction, fronts the wharves at Corner Brook at a distance of 0.5 mile; thence it continues to a position at the head of Humber Arm, about half-way between Wild Cove and Hughes Brook.

A dangerous sunken wreck lies about 0.5 mile SSE of Tucker Point.

1.56 South Head (49°09'N., 58°22'W.) rises in steep black cliffs from several pinnacles of light-colored rock at its base. In S or SW winds, heavy squalls sweep down on the head from the Murray Mountains to the S.

Devil Head, about 1.8 miles SW of South Head, rises 248m in perpendicular black cliffs, contrasted by the grass-covered slopes inland.

A fog signal is sounded from a white building on Devil

Little Port (49°07'N., 58°25'W.) is entered between Bara Point and Little Port Head, 230m W. Little Port affords anchorage for small vessels, in depths from 5 to 13m, sand and mud. Winds between the ESE and SSW cause violent squalls, and N winds send in a sea. The entrance of Little Port is dangerous for vessels in the spring and fall.

A light is shown from a circular tower on Little Port Head.

Virgin Mountain (Mount Virgin) (49°05'N., 58°25'W.) appears as a prominent isolated columnand rises to an elevation of 488m.

Bear Cove (49°01'N., 58°28'W.) indents the coast and is open to the N and W. White Rocks are a group of rocky islets, 9.4m high, lying about 0.5 mile offshore, 1 mile NE of Bear Head. The islets are difficult to distinguish against the yellowish cliffs on the coast. Temporary anchorage can be obtained in Bear Cove, in 16.4 to 18.3m, during offshore winds. The anchorage position is about 0.3 mile NNE of White Rocks.

1.57 Bear Head (49°01'N., 58°29'W.) rises as a vertical cliff to 386m. From the S, Bear Head resembles a crouching animal and is very conspicuous.

Between Bear Head and Fish Head, nearly 4 miles S, the coast consists of somewhat broken cliffs which become higher and steeper as the land rises within. The cliffs are steep-to and may be closely approached in good weather, but in stormy weather there is a heavy sea in the area.

Between Fish Head and the Serpentine River (Coal River), about 0.5 mile SE, the coast forms a small bight in which the conspicuous and detached Frair Rock rises 24m. Shoals, with depths of less than 9.1m, extend about 0.5 mile off the mouth of the Serpentine River. In good weather, anchorage can be obtained off these shoals, but even with SE winds, there is a heavy ground swell which becomes a heavy sea when the wind shifts to the W.

Two rounded summits rise ESE of Bear Head; both summits are conspicuous from seaward.

Rope Cove indents the coast in 48°55'N, 58°31'W. Depths of 6.1m, stones and boulders, lie 0.4 mile offshore between 0.65 mile and 1.35 miles SSW of the N entrance point of Rope Cove.

Directions.—The SW side of Bear Head, bearing 017°, open W of Coal River Head (48°58'N., 58°30'W.), leads close W of the above-described shoals.

Mount Barren rises to 701m in the Lewis Hills, about 2 miles SSE of Rope Cove. The mountain has a conspicuous cliff on its seaward side. A conspicuous, detached peak, which appears conical from the W, rises to 466m about 0.8 mile N of Mount Barren.

Bluff Head (48°47'N., 58°37'W.), the E entrance point of Port au Port Bay, rises to 497m. Bluff Head is a very conspicuous headland with a vertical cliff on its seaward side. Deep gullies are formed in the hills sloping down from the headland. In offshore winds, very violent squalls are prevalent near Bluff Head.

1.58 Dangers in the northeast approach to Port au Port Bay.—Shag Island (48°52'N., 58°35'W.) lies about 6 miles NNE of Bluff Head; its SW end should be given a berth of at

least 180m. North of the island, fair anchorage can be taken, in 21.9m. Shag Island Light is shown near the NE end of the island.

Long Ledge parallels the mainland in the vicinity of Shag Island. The middle part of this ledge dries and on it are some detached patches of boulders from 0.9 to 1.8m high. Breakers can be seen on the ledge, except possibly at spring tide in calm weather. In NW winds, good anchorage can be obtained under the lee of Long Ledge, in 14.6 to 18.3m.

Directions.—Mount Virginn well open NW of Bear Head and bearing 045°, leads NW of Long Ledge, in 18.3 to 24m.

The lights on Broad Cove Point (48°46'N., 58°39'W.), in line bearing 136°34', lead about midway between Long Ledge and Long Point to the SW, in a least depth of 10.9m.

The conical peak N of Mount Barren (48°53'N., 58°29'W.), in line bearing 072° with the middle of Shag Island, leads S of the SW end of Long Ledge, in 10.9 to 12.8m. This range must be used with caution, for if extended, it leads over Round Reef.

Round Reef, which has a least depth of 1.3m and breaks in heavy weather, lies with its 8.8m S extremity about 2.4 miles E of the 9.1m SW extremity of Long Ledge.

The conical peak N of Mount Barren, in line bearing 076° with the NE extremity of Shag Island, leads N of Round Reef.

The W extremity of Bear Head, in line bearing about 030° with the inner summit of Little Port Head, leads SE of Round Reef.

Bluff Head is a very conspicuous headland presenting a vertical cliff to seaward and rising to 497m. A light is shown about 1 mile SW of the summit of Bluff Head.

Port au Port Bay

1.59 Port au Port (48°34'N., 58°46'W.) (World Port Index No. 1821) is entered between Bluff Head, on the mainland, and Long Point, 5.5 miles W.

Ice.—Port au Port Bay generally freezes early in January and the ice breaks up toward the end of April. Drift ice does not enter the bay to any extent, and never inside of Fox Island, which 3 miles within the entrance.

Tides—Currents.—Near the NW shore of Port au Port Bay, at the entrance, the ebb current sets NE and at times attains a velocity of 2 knots at springs. Then it changes to W across the shoal depths known as The Bar, which extend 1 mile NE from Long Point. Outside The Bar, the ebb current continues W.

The flood current sets along the W side of the 4.5 mile peninsula at the head of the bay, directly into Head Harbor. The velocities of both flood and ebb are strong enough to cause a heavy cross sea during contrary winds.

In the passage between Fox Island and the mainland, 1.5 miles E, the flood current sets S and the ebb N across Fox Tail, a reef extending 2 miles N from Fox Island.

Depths—Limitations.—The outer half of Port au Port Bay is principally encumbered with Fox Island and its reef, plus French Bank and American Bank, two additional reefs. However, a 16.4m channel leads past Fox Island into East Bay and a 10m channel leads between French Bank and American Bank into West Bay.

A sandy shoal, with depths of less than 9.1m, extends N and NE from the 4.5 mile peninsula at the head of Port au Port Bay.

There are scattered depths of 9.7 to 12.8m between the extremity of this shoal and the S end of American Bank.

East Bay has depths of 37m extending to less than 0.7 mile from Port au Port village at the head of the bay. West Bay has general depths of 16.4m,; Head Harbor has general depths of 6.1 to 7.3m in its central port. Shoal flats extend off the NW entrance point of East Bay, and a small rocky patch lies off the NE entrance point of West Bay.

Aspect.—A radio tower, from which obstruction lights are shown, stands at an elevation of 210m, about 2 miles SW of Rocky Point, the W entrance point of West Bay. Three other radio towers, at elevations of 218 to 265m, stand close N and E of the lighted tower.

Between **Two Guts Pond** (48°39'N., 58°40'W.), the mouth of which lies about 2.5 miles SSE of Road Point, and the head of East Bay, about 5 miles SSW, is a conspicuous plateau which rises to 381m. The plateau falls gradually to the Fox Island River to the N, and to the S terminates in Table Mountain. Table Mountain, 361m high, rises about 1.8 miles ENE of the isthmus at the head of the bay; it appears as the end of the high land to the N when viewed from sea across the Port au Port peninsula.

A dome, conspicuous from seaward, stands about 1.3 miles SE of Black Head.

The Roman Catholic Church of Port au Port, which has a conspicuous spire, stands about 0.5 mile W of the isthmus.

Two lights, in line bearing 136°34', stand on Broad Cove Point (48°46'N., 58°39'W.). The range leads from seaward in a least depth of 10.9m between the shoals SW of Long Ledge and the shoals NE of Long Point. A light is exhibited from a position 3 miles SSW of Broad Cove Point.

Long Point Light lies about 5 miles WNW of Broad Cove

Fox Island River Light is shown from a square tower situated on the north side of the river entrance.

A lighted buoy is moored about 2.5 miles N from the N extremity of Shoal Point (48°38'N., 58°50'W.).

Outer Portion of Port au Port Bay—East Side

1.60 Between the **Fox Island River** (48°42'N., 58°40'W.) and Road Point, the shore is bordered by shoals which extend as far as 0.7 mile offshore. North of the shoals anchorage can be taken, in 18.3m, mud, about 1.3 miles bearing 106° from the S extremity of Fox Island.

Fox Island, 44m high, lies about 2.5 miles SW of Broad Cove Point; grassy slopes on the W side of the island contrast markedly with dark clumps of spruce on the summit. Within 0.5 mile NNE and 1 mile W of the island, there are several dangerous rocks. A stranded wreck lies 0.25 mile NE of Fox Island, on the edge of a shallow bank, in about 5.5m. Good anchorage, in 20.1 to 24m, mud, can be obtained a short distance ENE of the shingle beach on the SE side of Fox Island. This anchorage should not be used in strong SE to SW winds, for they cause a heavy sea, especially during the flood current.

Fox Tail, a reef, extends about 2 miles N from Fox Island.

Directions.—The W summit of Bear Head (49°01'N., 58°30'W.), in line bearing 025° with the W end of Shag Island, leads SE of Fox Tail in a least depth of 16.4m. This range also

leads through the channel between Fox Island and the shoals off the mouth of the Fox Island River in a least depth of 20.1m.

Outer Portion of Port au Port Bay—West Side

1.61 In uncertain weather, vessels should not anchor off a position 7.5 miles SW of Long Point, since the holding ground is better farther S. Southeasterly and SW winds cause a choppy sea.

French Bank is centered about 1 mile SSE of Long Point. American Bank lies on the W side of the centerline of Port au Port Bay.

Directions.—Road Point (48°41'N., 58°41'W.), in line bearing 164° with the SW extremity of Fox Island, leads NE of French Bank and American Bank.

The NW extremity of the high hills on the S side of the valley behind Bear Head, just open NW of Shag Island and bearing 043°, leads between French Bank and American Bank into West Bay.

The summit of Bear Head, in line bearing about 027° with North Rock (48°45'N., 58°42'W.), leads W of Fox Island and SE of American Bank and the detached 6.1m rock off its S end.

Inner Portion of Port au Port Bay

1.62 East Bay is entered between Road Point and Shoal Point, about 6.5 miles WSW. Though shelter is afforded from gales between the NNE and ESE, the probability of the wind shifting to the S and W renders East Bay insecure.

East Road, close SW of Two Guts Pond, is probably the best anchorage in East Bay during strong NE to SE winds. But, if the wind shifts S with a falling barometer, it is prudent to shift to West Bay.

Anchorage off Port au Port is not secure. Although the bottom is mud, a heavy sea sets in during N winds because of the considerable depths close offshore.

A sand flat extends 2.5 miles NNE from Shoal Point.

Anchorage.—The only secure anchorage in Port au Port Bay is in Piccadilly Bay (Head Harbor), where moderate-sized vessels can find shelter. West Bay affords shelter during SW and NE gales. East Bay affords shelter from gales between the NNE and ESE, but the probability of the wind shifting to the S and W renders it insecure.

Directions.—A flat-topped, distant mountain, in line bearing 088° with the S extremity of the low wooded bluff on the N bank of the Fox Island River, leads N of the above-mentioned sand flat and S of American Bank. The distant mark is easily identified, except when the sun is about on the same bearing.

Shag Island Light, bearing 043° astern, leads over the E part of French Bank and the NW edge of American Bank, in a depth of about 11m, and into West Bay.

An alternate approach range for Port au Port Bay is Road Point in range 164° with the SW extremity of Fox Island. This range leads between Long Point and Long Ledge in a least charted depth of 10.6m. To continue into West Bay, use the 043° range astern described above.

West Bay is entered between Shoal Point and Rocky Point, about 4.7 miles W. Northeast gales raise a heavy sea in the bay, especially against the ebb tidal current. The middle of the bay affords the best anchorage for large vessels in Port au Port

during SW and NW gales, for though the sea is heavy, it is not so short as in East Bay, and the stiff mud bottom is good holding ground.

Moderate-sized vessels can anchor in Head Harbor. The holding ground is good and the anchorage is secure, even in strong NE winds.

1.63 Long Point (48°47'N., 58°46'W.) is the N extremity of the Port au Port Peninsula. The NW coast of this peninsula between Long Point and Clam Bank Cove, about 12.8 miles SW, is bordered by rocky ledges and boulders; a heavy surf usually breaks on it. For the first 1.5 miles, it is treeless and covered with grass, then it is thickly wooded and rises in a gentle slope. Clam Bank Cove has a stony beach and some shelter for landing boats.



Long Point

The coast for 1 mile SW of Clam Bank Cove consists of low cliffs, then clay cliffs gradually increase in height to 70m, decreasing again at Three Rocks Point.

Between Clam Bank Cove and Three Rocks Point is Round Head, a long ridge with three distinct peaks. The middle and highest peak, which rises to 253m, is perpendicular on its seaward side.

Low Point is a slightly rounded projection about 3.5 miles SW of Three Rocks Point. **Cow Rocks** (48°35'N., 59°10'W.) are a group of rocks fronting Low Point and almost 0.3 mile offshore; the NE rocks are 2.7m high.

Cow Rocks, bearing 216° and open NW of Cape Cormorant, leads NW of the dangers extending from Three Rocks Point.

Red Island, faced on all sides by red cliffs, lies about 1 mile NW of Cape Cormorant.

A light is situated on the NW side of the island and exhibited from a pyramidal skeleton tower, with a white daymark.

The Ridge is a reef connecting Red Island with the mainland about 1.8 miles ESE. It has depths of 2.7 to 4.6m. There are considerable overfalls on The Ridge ,especially in strong W winds; in heavy weather it breaks over nearly its whole extent.

Vessels of suitable draft can cross The Ridge in fine weather by steering with Crow Head in range 045° with Low Point.

The tidal currents set strongly over The Ridge, with the flood setting NE and the ebb setting SW.

Red Island Road, on the N side of The Ridge, affords good anchorage, in 20.1 to 26m, in winds S of SW. The bottom is mostly sand, with mud in places. The best berth for a large vessel is in 26m, with the NE end of Red Island bearing 278°, and the cliffs about 2 miles SSW of Cape Cormorant bearing 200°.

A heavy ground swell indicates strong W winds in this locality. In winds N of SW, a heavy sea sets into the anchorage and it is then imprudent to remain.

Cape Cormorant is a perpendicular limestone cliff, about 213m high, which rises inland to a conical summit, 354m high.

Big Cove, with an entrance about 1.5 miles wide, indents the coast midway between Cape Cormorant and Cape St. George.

St. George's Bay

1.64 Cape St. George (48°28'N., 59°16'W.) is the SW extremity of the Port au Port Peninsula.

St. George's Bay (48°27'N., 58°47'W.) is entered between Cape St. George and Cape Anguille, 34.5 miles SW. With the exception of Saint George's Harbor, the bay is entirely without sheltered anchorage. Because of prevailing W winds a swell generally rolls in, which in a gale quickly becomes a heavy sea.

Winds—Weather.—Fog is not uncommon in spring after the ice has disappeared, but it is neither as thick nor as lasting as the fog on the S part of Newfoundland.

Ice.—St. George's Bay fills with constantly moving river ice which may fill the bay early in January, or not until February. The bay generally clears between April 10 and 25, although it has been full of ice during May. Steady S and SE winds have occasionally cleared the bay of river ice altogether. The inner portion of St. George's Bay is generally frozen over between December and April, but in some years it is ice-free. The head of the bay occasionally freezes.

Tides—Currents.—The flood tide sets into the bay at 0.5 knot, but the main flood current sets to S off the entrance. During strong SE winds, the flood tidal current sets into the bay at 1 knot

Depths—Limitations.—The outer part of St. George's Bay has depths of 37 to 147m. A 16.4 to 37m bank, 4 to 9 miles wide, crosses the bay SSE from a general area on the N shore about 15 miles E of Cape St. George. Depths increase E of the bank to 92m, and decrease to 37m in the entrance of the head of the bay. The head shoals evenly to the 10.9m curve. Saint George's Harbor has depths of 7.3 to 16.4m.

St. George's Bay—North Side

1.65 Between Cape St. George and Marches Point, about 6 miles ENE, the bottom offshore is rough and fit only for temporary anchorage in good weather.

Marches Point (March Point), which is fronted by a stony beach, is low and flat. The green of Marches Point contrasts noticeably with the dark wooded hills behind. A conspicuous hill, divided by a deep gully, rises to 233m about 1 mile NE of Marches Point. The W part of the hill is thickly wooded, but the E part is bare.

Sheaves Head, about 2.8 miles ENE of Marches Point, is about 15m high. It is a steep cliff. Sea Mouse Rocks are three rocky patches lying offshore between Marches Point and Sheaves Head.

Lower Cove is entered W of Pigeon Head (48°31'N., 59°01'W.), a conspicuous, perpendicular bluff, 33m high. A small 7m patch, about 0.5 mile W of Pigeon Head, lies in the middle of the entrance of Lower Cove; the patch is marked by a lighted buoy. Vessels can obtain temporary anchorage inside the 7m patch, but the ground is rough and a heavy swell sets in when the wind is WNW.

A limestone quarry and loading operation is located about 0.8 mile NW of Pigeon Head. The quarry is a large, light-colored scar appearing against the dark landscape and is conspicuous from seaward. The loading pier, which has a total length of 298.5m, consists of five equally-spaced concrete caissons. Depths alongside are generally greater than 13m, although there is a depth of only 12.5m at the SW corner of the center caisson. A shoal depth of 4.7m lies 340m E of the E caisson; another shoal depth of 3.8m lies about 225m WSW of the W caisson.

Ship Island lies about 2 miles E of Pigeon Head. A rocky patch, with depths of 6.1 to 9.1m, extends from 200 to 640m SW of Ship Island, but passage between should not be attempted.

Isthmus Bay lies on the S side of the short, narrow isthmus joining the Port au Port Peninsula and the mainland. The bay is frequently used as an anchorage, but the holding ground is uncertain and a heavy swell sets in during winds from WSW. Depths in the bay shoal gradually from 10.9m in the entrance. The Port au Port Roman Catholic Church, which has a conspicuous spire, stands about 0.8 mile W of the head of the bay.

Gravels Bank, with depths of less than 18.3m, extends about 3.5 miles S from the head of Isthmus Bay. The least depth on the bank is a 10.6m stony patch lying about 2.5 miles SE of the spire at Port au Port. Slight tide rips show on this patch at springs.

Romaines Brook, which dries at its mouth, enters St. George's Bay about 3 miles E of the Port au Port church spire. On the E side of the brooks entrance an outcrop of gypsum is conspicuous when the sun shines on it. Two conspicuous, detached, whale-backed summits, the higher 332m, rise about 2 miles N of the mouth of Romaines Brook. A bridge crosses the brook about 180m from its mouth.

Blanche Brook lies about 4 miles E of Romaines Brook. Stephenville Airport lies close E of the mouth of Blanche Brook. Five towers are centered about 0.5 mile NE of the mouth at Blanche Brook. An aero light lies nearly 0.8 mile ENE of the center tower. In addition, obstruction lights are shown in the vicinity of the lights just described.

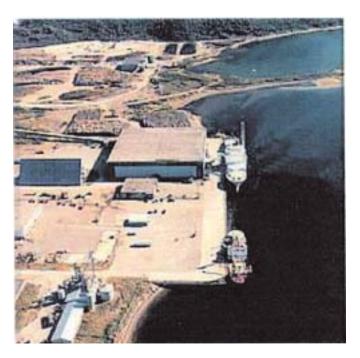
Stephenville and Port Harmon

1.66 Stephenville (48°32'N., 58°32'W.) (World Port Index No. 1810) and Port Harmon are situated within Shallow Lagoon, separated from St. George's Bay by a barrier beach.

About 0.7 mile NNW of Indian Head, a dredged channel cuts through the barrier beach and leads about 1.5 miles NNE to a turning basin and wharf on the E side of Stephenville. The entrance of the dredged channel is protected by a piled-stone breakwater projecting nearly 0.8 mile SSW from the N side of the cut



Courtesty of Geological Survey of Canada—Terrain Sciences
Stephenville



Courtesty of Transport Canada **Stephenville**

The port of Stephenville/Port Harmon consists of one berth used by both general cargo vessels and tankers. It is 293m in length and has a depth alongside of 9.2m.

Ice.—Though the port is open year around, operations are curtailed from December to March, inclusive, because of high winds and seas.

Depths—Limitations.—The channel leading into Stephenville Pond is 72m wide and 1.5 miles long. The channel has a controlling depth of 10m and leads to a turning basin having a controlling depth of 9.2m. A vessel, with a maximum draft of 8.2m, is the largest vessel that can be accommodated. There are daylight sailings only.

The main wharf is on the NE side of the turning basin. It is 291m long with a least depth of 7.8m alongside.

Close SE of the wharf there is a small jetty in ruins.

Dolphins situated at a pulpwood discharge terminal can be used to accommodate vessels of over 183m in length, with a maximum draft of 8.2m.

Aspect.—Hills rise steeply to over 152m on the SE side of the lagoon; four aviation warning lights are situated on the higher elevations of these hills. About 11 mile NE of Indian Head a conspicuous peak rises to 698m.

Lighted Buoy XS is situated about 0.8 mile SSW of the entrance, from the NW side of which a stone breakwater extends 400m SSW. The breakwater light is shown on its outer end.

A lighted buoy is moored close off some drying rocks which extend nearly 90m SE from the breakwater head. Stephenville Channel Light is shown on the W side of the channel, about 365m NNE of the breakwater light. A similar light is shown on the W side of the channel, 0.4 mile farther NNE.

Behind the wharf on the NE side of the basin there are two leading lighted beacons. The beacons, in line bearing 024°, lead from Lighted Buoy XS into and through the dredged channel, and into the turning basin, but a ship should keep slightly E of the alignment when passing the head of the breakwater to ensure clearing the shoal water extending 90m SE from it.

Pilotage.—Pilotage is compulsory. The pilot boards at the Lighted Buoy XS. Pilots should be requested from the Atlantic Pilotage Authority at least 12 hours prior to arrival at the pilot boarding station. Confirmation of ETA should be made 4 hours prior to arrival.

Anchorage.—The holding is poor and vessels are exposed to the prevailing W wind.

Regulations.—Port Harmon, which forms the harbor of Stephenville, is a Public Harbor administered by the Canadian Ministry of Transport. It is open all year round, but navigation may be restricted from December to March by weather conditions.

Caution.—Great care must be used in navigating the entrance channel, especially with W winds.

Booms of logs are often being towed within the harbor and mariners are warned that floating and partly-submerged logs may be encountered at any time.

A submarine pipeline extends 0.4 mile SSW from the shore close SE of the entrance.

Indian Head (48°30'N., 58°32'W.) is a conspicuous, cliffy headland, 58m high. The headland gradually rises to a conical wooded peak, 192m high, about 1.4 miles NNE.

St. George's Bay—South Side

1.67 Cape John (47°58'N., 59°18'W.), nearly 5 miles NE of Cape Anguille, is the rocky N entrance point of Snakes Bight, a 2.5 mile wide indentation. In ESE to S winds, vessels can anchor in Snakes Bight, in 29 to 33m.

Old Bone-em, a needle-pointed rock, 40m high, lies about 2.8 miles NE of Cape John. Old Bone-em is close offshore and is distinctly seen only from a direction nearly parallel with the coast.

Johnsons Cove indents the coast about 14.5 miles NE of Cape Anguille. Conspicuous bare cliffs, 384m high, overlook the N side of Johnson Gulch, a gully which extends inland from Johnsons Cove.

Lewis Point (48°06'N., 59°05'W.) appears as the tangent of the coast on E bearings. Lewis Rocks, two detached rocks, with the E one being 6.1m high, are located about 365m NE of the point.

Gulls Nest Rock, 16m high, stands close to the coast, about 2.8 miles NE of Lewis Point. The Spout Falls is a conspicuous waterfall about 1 mile E of Gulls Nest Rock.

Highland Church, on the coast 1.75 miles NE of Shoal Point (48°09'N., 58°57'W.), is a conspicuous white building with a small, square tower.

Plaster Cove is entered between Shoal Point and Highland Church. About 0.8 mile NE of Shoal Point, an outcrop of gypsum is conspicuous. The N part of Plaster Cove has shoal depths of 6m, 545m offshore, but WSW of these depths good anchorage can be obtained, in 10.9 to 18.3m, during offshore winds. The bottom is soft in places. A small, stony 6.9m shoal lies about 0.7 mile NNW of Highland Church.

Directions.—The N summit of Robinson Head (48°16'N., 58°48'W.), bearing about 051° and open NW of Harbor Point (48°11'N., 58°55'W.), leads NW of the shoal water in Plaster Cove and outside a 7.3m shoal NNW of Highland Church.

Between **River Brook** (48°11'N., 58°53'W.) and Crabbes Brook (Crab Brook), about 2 miles NE, the coast is composed of low cliffs backed by steep slopes. This section of the coast should be given a berth of 0.75 mile.

Crabbes Brook Village is situated on both shores of Crabbes Brook, just within the entrance. There is a conspicuous white church with a red roof on the SW shore of the brook.

A conspicuous church (48°15'N., 58°47'W.) stands in a village on the NE side of the entrance of Robinson Brook.

Robinson Head (48°16′N., 58°48′W.), about 0.8 mile NE of Robinson Brook, rises on its N side to a flat-topped summit, 74m high. The W summit of Robinson Head is a peak of white sand, with grass and stunted trees on its landward side. The conspicuous face of the slope shows alternate patches of white sand and brushwood.

Bank Head (48°22'N., 58°41'W.) rises to a conspicuous cliff, 45m high, about 0.5 mile S of the head. Several summits of the range, about 12 miles inland, are conspicuous. One saddle-shaped summit, 538m high, rises about 15.5 miles SSE of Bank Head.

St. George's Bay—Head

1.68 Cairn Mountain (Steel Mountain), 306m high, is a conspicuous mass of ironstone rising about 4.5 miles SE of Turf Point (48°26'N., 58°28'W.). Rugged, broken ridges continue NE from Cairn Mountain. Conspicuous in the ridges is a white patch about 3 miles NE of Cairn Mountain.

Flat Island is a low ridge of stones and shingle. It lies on the S side of the approach to the head of St. George's Bay. In foggy weather, vessels should keep in depths over 22m. Harbour Point, its NE extremity, is marked by a light. Between Flat Island and the coast SE is Flat Bay.

Saint George's Harbor (48°27'N., 58°27'W.) (World Port Index No. 1820) occupies the outer 0.75 mile of Flat Bay. Flat

Island protects Saint George's Harbor from the W and NW. The central part of Flat Island for a distance of 1.75 miles has been eroded away and offers no protection from the sea at HW. The harbor is normally navigable from the beginning of May until the end of December.

Tides—Currents.—The MHW interval at Saint George's Harbor is 9 hours 49 minutes; spring tides rise 1.5m and neap tides rise 1.1m.

At spring tides, the tidal currents run with some strength at the anchorage SE of Harbor Point.

Depths—Limitations.—There are depths of 12.8 to 18.3m at the entrance of Saint George's Harbor, shoaling evenly to 5.5m at the steep-to edge of the shoal water in Flat Bay, about 0.8 mile within the entrance. The 5m curve, which lies 180m off Turf Point, extends as far as 670m off the shore between Turf Point and the pier at Saint George's.

The Flintkote Jetty is about 230m long and has berths on either side. The E side has depths of 5.2 to 11.6m; the W side has depths of 7.6 to 12.5m. An L-shaped government wharf, situated in St. George's, may be used by small craft. A submerged crib, with a depth of 8.7m, lies about 174m, bearing 261°, from the outer end of the wharf.

Aspect.—The Episcopalian Church at Sandy Point Village has a low, white spire and stands in a grove of trees 0.75 mile WSW of Harbor Point.

The Saint George's Village Episcopalian Church stands about 1 mile SW of Turf Point. The church is painted yellow and has a red roof and a low square tower.

The Catholic Church, gray and white, with a small yellow dome and clock beneath, stands about 0.3 mile E of the Episcopalian Church.

The Methodist Church, a white building with a red roof and white, square tower, stands 0.5 mile W of the Episcopalian Church.

A light is shown on the head of the Flintkote Jetty, which is situated at Turf Point, the S entrance point to Flat Bay.

A light is shown on the head of St. George's Wharf, about 0.7 mile SW of Turf Point.

St. George's leading lights are shown close SW of the Government Wharf. In line bearing 179°, they lead in the approach channel, which is marked by two pairs of buoys. There are depths of 1.2m about 180m NNW, and 0.9m about 0.2 mile NW, of the head of the wharf; a vessel must adhere to the leading line until the inner pair of buoys has been passed, when course must be altered E to proceed alongside the face of the wharf

Pilotage.—If required, a pilot can be obtained by the Flint-kote Company of Canada Ltd.; 5 hours notice is required.

Anchorage.—Anchorage can be obtained anywhere N of Harbor Point, within a reasonable distance of shore. However, in strong W winds- a heavy sea sets in; during fresh E winds violent squalls blow off the land.

Easily-accessible anchorage may be taken SE of Harbor Point, in 10.9 to 18.3m, stiff mud, good holding ground.

Small vessels with local knowledge anchor off Turf Point.

1.69 Cape Anguille (47°55'N., 59°24'W.) rises steeply to a sharp summit, 187m high. The land within the summit, after forming a slight hollow, rises again to a range of high hills. The

NE side and summit of this range are thickly wooded, but the W and S sides have been cleared and are covered with dead stumps and grass. A light is shown about 1 mile S of the cape.

The summit and NE side of Cape Anguille are thickly wooded, but the W and S sides are cleared.



Cape Anguille Light

Between Cape Anguille and Beach Pointe, about 2 miles S, the coast rises steeply to the W end of the Anguille Range. Clearings on the lower slopes contrast noticeably with dark trees about and sometimes below.

Codroy Island, 10.9m high, lies about 0.2 mile SW of Beach Point. Numerous buoyed fishing nets are usually moored along the coast of Codroy Island. On the E side of the island is a small harbor, where fishing vessels with local knowledge anchor. Codroy Light is shown on the S extremity of Codroy Island. The fairway lighted buoy is moored 0.45 mile ESE of the light.

Codroy Road is entered between the S end of Codroy Island and Stormy Point, about 2 miles SSE. Codroy Road affords anchorage, in 9 to 18m, stones. A swell nearly always rolls in from seaward and in W winds the anchorage is insecure. The MHW interval at Codroy Road is 8 hours 50 minutes; the mean range of tide is 0.8m and the spring range is 1.1m The flood current is usually N, while the ebb current is usually S. Heavy tide rips are frequent between Codroy Island and Cape Anguille. In stormy weather, a heavy, confused sea makes up in this locality.

Stormy Point is a narrow, reddish-colored, cliffy projection which should be given a berth of 0.5 mile.

The Grand Codroy River is entered about 1.5 miles E of Stormy Point. A conspicuous steeple stands on the S side of the river entrance.

The Little Codroy River lies about 0.8 mile E of **Larkin Point** (47°46'N., 59°20'W.). Small vessels with local knowledge anchor off the mouth of the river in offshore winds.